

MOTOR AGE

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INTERNATIONAL RACING AT EMPIRE MEET



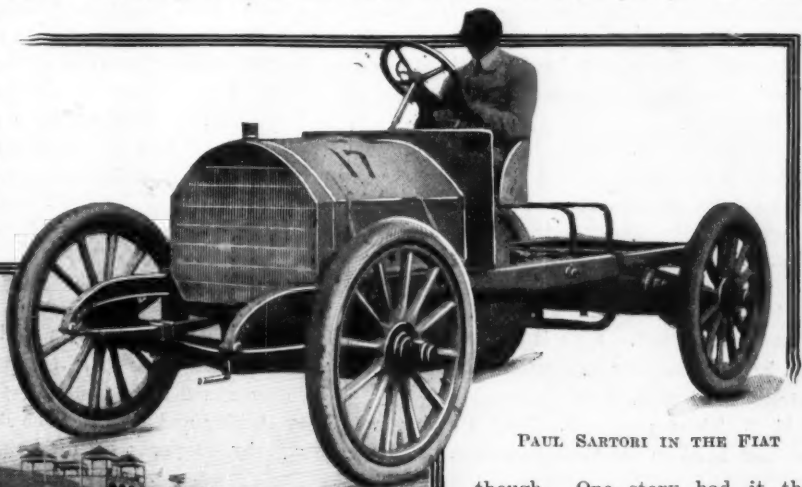
NEW YORK, Sept. 24.—It may have been that the nearness of the Vanderbilt cup race has turned the automobile enthusiasm of New Yorkers toward speed contests. It may have been the promised participation of three of the drivers and two of the cars that are booked for the international race next month. It may have been that the throng came to see Carl Fisher and his

eight-cylinder Premier Comet go against Charles Basle and the record-breaking Bowden Mercedes in a 5-mile pursuit race. These were all, no doubt, potent factors in attracting the crowd; but the chances are that the making of the free-for-all an international cup track race by segregating the makes by nationality into trial heats at 5 miles and bunching the winners in a final at 10 miles was most of all responsible for the international trade rivalry that spread to the general public of cosmopolitan car-owning New York and was the color scheme of the whole tournament run at the Empire track today.

Before the races were half an hour under way there was on hand the biggest crowd that the Empire track ever had within its gates, whether at a race meet of trotters or motor cars. The grand stand was filled, the club house balconies were packed and spectators four deep lined the wire that guarded the lawn in front of the home-stretch. A count of the auto-

other popular Saturday afternoon sports that attract big crowds.

Almost at the outset of the racing the spectators were met with the announcement that the two most largely advertised attractions had gone by the board. In a warming up mile, announced as having been done in 54 seconds, the Bowden Mercedes cracked two front cylinders. Then came the announcement that in practice the day before the Comet had broken a driving shaft. Tod Sloan, too, had been press-noticed as intending to make his debut as an automobile jockey. He didn't,



PAUL SARTORI IN THE FIAT

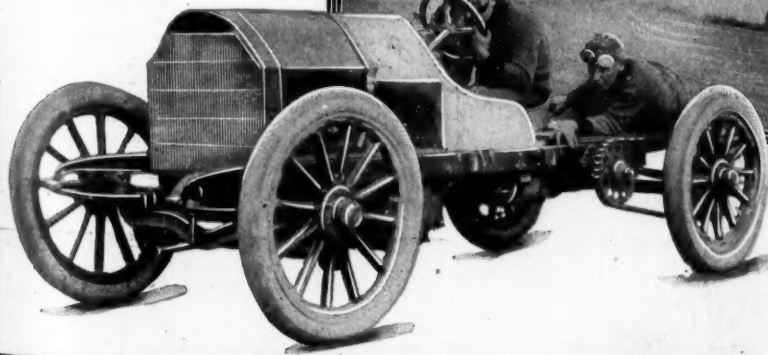
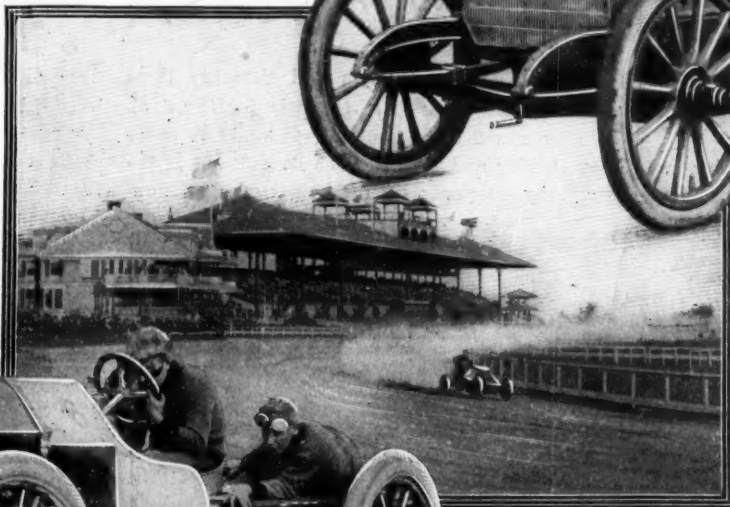
though. One story had it that a water connection of his Decauville had broken and another that he had been pinched for speeding en route to the track and that his car had been held as security for his appearance at court the next morning.

It was a good natured New York crowd, though, and no grumbling was heard. With the Fischer-Basle match off and the Comet and record holding Mercedes out of the international cup

JOE TRACY IN THE RENAULT
BREAKING RECORDS

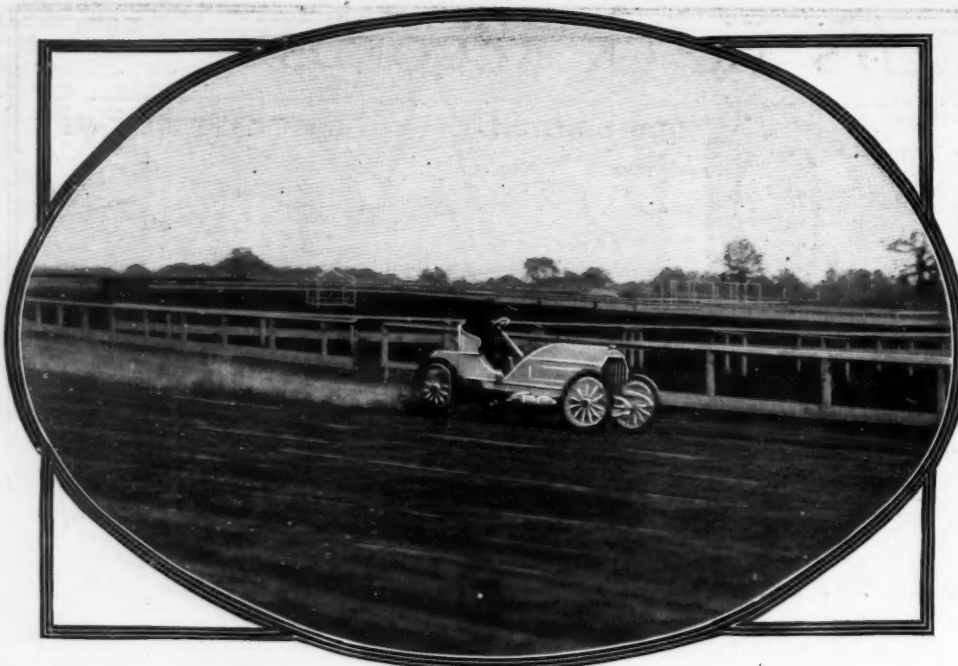
race, there was still left a likely and closely matched trio in the Ford light-weight record car, the middle-weight champion Brokaw Renault, and the Thomas Mercedes 60, which had done so well on the Jersey coast and at Poughkeepsie. That they were to meet in an international race caused the absence of the heralded stars to be forgiven, if not entirely forgotten.

Before the races were far under way, however, an old acquaintance evolved as a new star and gave the crowd a freshly-crowned favorite to cheer. Joe Tracy clinched his reputation as being New York's best all-around driver. Two cars were his to pilot—the Royal Tourist he is to guide in the Vanderbilt cup race and W. G. Brokaw's 40-horsepower Renault, which established middle-weight records at the last Empire track meet with M. G. Bernin at the wheel. The former appeared in its remodeled Vanderbilt cup race form with a large, square hood in front and a big gasoline tank back of the seat. It started in the first heat of the handicap, being given 25 sec-



E. E. HAWLEY DRIVING THE THOMAS MERCEDES

mobiles housed beneath the stand and packed on the lawns showed 445 of them. How impressive was the magnitude of the throng may be judged from the newspaper estimates of the attendance. None put it at less than 10,000 and one or two called it 15,000. The box office count, however, showed that some 7,600 people had passed through the gates, which is 50 per cent more than ever came there before. Such is the hold automobile track racing has gained on New Yorkers in spite of the opposition of the running tracks, the ball games and half a dozen



CHARLES BASLE DRIVING THE 100-HORSEPOWER MERCEDES A MILE IN 54 SECONDS

onds to the Ford's 10. Though failing to qualify for the final in the first heat, Tracy beat Kulick by 10 yards. In his role, as Renault driver Tracy won the international race in middle-weight record time, driving the car 12 seconds faster than Bernin had done at the July meet, was victor in the 881 to 1,432-pound 10 miles, and qualified for the final of the handicap.

Hawley and the Thomas Mercedes, both Vanderbilt cup entrants, failed to qualify for the final in the handicap and were runner up to Tracy and the Renault in the international race. Another competitor having to do with the coming Long Island struggle was Paul Sartori. He had only a 24-horsepower touring Fiat as his mount. With it he won the handicap handily, but was outclassed in power in the international race.

E. R. Thomas and W. Gould Brokaw were both on hand to see their cars race. The for-

heats. The Italian heat had for starters two 24-horsepower Fiat touring cars driven respectively by C. H. Parker and Paul Sartori. Parker was first away and led by 10 yards at the mile and 25 yards at 2 miles. In the third mile Sartori jumped into the lead and got 100 yards to the fore, which Parker cut to 60 at the finish. The times were, 1:20%, 2:34%, 3:50%, 5:05%, 6:20. Parker's time was 6:21%.

Joe Tracy and the Renault had an easy win of it against M. C. Hermann's 70-horsepower Panhard, driven by Felix Froger. The latter quit in the first mile when ¼ mile behind. The times were 1:04, 2:03%, 3:03%, 4:08%, 5:08%. These were new rewards for 2 and 3 miles.

France, Italy, America and Germany lined up in their order from the pole for the final. Tracy was first to the turn, followed in order by Hawley and Kulick. The Renault led at the mile by 40 yards with the Mercedes an hun-

dred yards ahead of the Ford and the Fiat but just rounding the turn into the stretch. Tracy increased his lead over Hawley to 100 yards in the second mile and Hawley had pulled away to ½ mile from the Ford. At this point the Ford quit. Kulick had been having trouble with his batteries and engine all day. The Fiat touring car was, of course, hopelessly outclassed. It was lapped in the sixth mile and not noticed after that. Tracy maintained a lead of from 180 to 220 yards over Hawley to the end, where his lead was ¼ mile.

Tracy had been doing middle-weight record breaking from the 2 mile mark to the finish. After covering the first mile in 1:03% he followed with 2:02%, 3:02, 4:01%, 5:01, 6:01%, 7:01%, 8:02%, 9:02%, 10:01%. The former figures, scored by M. G. Bernin with this same car at the Empire track meet on July 18, ran from 2:04½ for 2 miles to 5:08½ for 5 and 10:13% for 10 miles. Hawley's time was 10:07%.

The race for the Old Glory cup at 5 miles was confined to American touring cars. In this race the cars carried full equipment and three passengers averaging not less than 150 pounds each, besides the operator, who had to crank his motor and drive the car the whole distance. All the starters were of 24 horsepower: A. E. Morrison, Peerless; William Walters, Walter; A. S. Lee, Pope-Toledo, and Charles Soule, Pope-Toledo. This was a rattling good race throughout. Lee led by 10 yards at the mile, with Soule double that distance ahead of Morrison. Walters was out of the running from the start. In the second mile Lee dropped 20 yards behind Morrison, who was chasing Soule 10 yards back. But two lengths separated the leaders at 3 miles. It was nip and tuck between Morrison and Soule to the last mile, when Soule drew away a bit and won by a scant 40 yards, with Lee a half mile to the rear. The times were 1:42%, 3:06%, 4:28%, 5:50%, 7:12%. Morrison's time was 7:13%.

There were three starters in the middle-weight 10 miles for the Knickerbocker cup: Joseph Tracy, 40-horsepower Renault; H. R. Lounsbury, Jr., 18-horsepower Meteor, and Frank Kulick, 20-horsepower Ford. Kulick reached the turn first, but Tracy passed him on the backstretch and led him by 30 yards at the mile. This he increased to a furlong at 2 miles and 400 yards at 3 miles. Here Kulick stopped. Battery troubles were the cause. The light powered Meteor was outclassed and distanced. Tracy's times were 1:07%, 2:07%, 3:08, 4:08%, 5:08%.

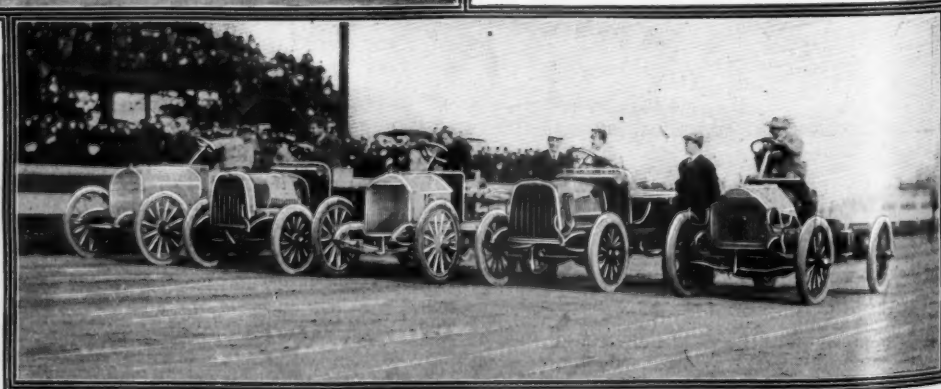
Twelve cars gathered at the judges' stand to get their allowances for the great Empire handicap at 5 miles, which it was the thankless task of E. T. Birdsall and A. L. Riker



GETTING READY FOR KNICKERBOCKER CUP RACE

mer got some consolation for his defeat in looking forward to the arrival of a 110-horsepower Mercedes flyer he had just bought. Mr. Brokaw will have his new 90-horsepower Renault in time for the Vanderbilt race. Mr. Thomas will have to do as best he can with his present 60.

France, Germany, Italy and the United States were represented by cars in the international race. Owing to the withdrawal of the Premier and the Bowden Mercedes the Ford and the Thomas Mercedes were not required to go the distance in the American and German



A LINE-UP OF RACING CARS

THE WORLD'S TRACK RECORDS

FREE FOR ALL

MILES.	TIME.	HOLDER.	CAR.	MEET.
1	0:52 4/5*	Earl Kiser	80-H. P. Winton	Cleveland Aug. 22, '04
2	1:53 2/5	Chas. Basle	90-H. P. Mercedes	Providence Sept. 10, '04
3	2:47 2/5	Chas. Basle	90-H. P. Mercedes	Providence Sept. 10, '04
4	3:42 2/5	Chas. Basle	90-H. P. Mercedes	Providence Sept. 10, '04
5	4:37 2/5	Chas. Basle	90-H. P. Mercedes	Providence Sept. 10, '04
6	5:32 1/5	Chas. Basle	90-H. P. Mercedes	Providence Sept. 10, '04
7	6:26 4/5	Chas. Basle	90-H. P. Mercedes	Providence Sept. 10, '04
8	7:21	Chas. Basle	90-H. P. Mercedes	Providence Sept. 10, '04
9	8:17	Chas. Basle	90-H. P. Mercedes	Providence Sept. 10, '04
10	9:13	Chas. Basle	90-H. P. Mercedes	Providence Sept. 10, '04
11	10:29 3/4	Barney Oldfield	80-H. P. Winton	Denver, Col. Oct. 19, '03
12	11:27 3/4	Barney Oldfield	80-H. P. Winton	Denver, Col. Oct. 19, '03
13	12:25 3/4	Barney Oldfield	80-H. P. Winton	Denver, Col. Oct. 19, '03
14	13:23 3/4	Barney Oldfield	80-H. P. Winton	Denver, Col. Oct. 19, '03
15	14:21	Barney Oldfield	80-H. P. Winton	Denver, Col. Oct. 19, '03
16	15:41 2/5	Paul Sartori	60-H. P. Mercedes	Empire, N.Y. July 18, '04
17	16:39 4/5	Paul Sartori	60-H. P. Mercedes	Empire, N.Y. July 18, '04
18	17:38 4/5	Paul Sartori	60-H. P. Mercedes	Empire, N.Y. July 18, '04
19	18:37 1/5	Paul Sartori	60-H. P. Mercedes	Empire, N.Y. July 18, '04
20	19:37 1/5	Paul Sartori	60-H. P. Mercedes	Empire, N.Y. July 18, '04
21	20:36 2/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
22	21:34 2/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
23	22:32 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
24	23:30 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
25	24:28 2/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
26	25:26 2/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
27	26:24 2/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
28	27:22 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
29	28:20 2/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
30	29:18 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
31	30:16 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
32	31:14 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
33	32:12 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
34	33:10 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
35	34:08 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
36	35:06 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
37	36:04 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
38	37:02 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
39	38:00 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
40	39:00 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
41	40:00 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
42	41:00 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
43	42:00 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
44	43:00 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
45	44:00 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
46	45:00 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
47	46:00 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
48	47:00 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
49	48:00 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
50	49:00 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
51	50:00 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
52	51:00 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
53	52:00 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
54	53:00 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
55	54:00 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
56	55:00 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
57	56:00 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
58	57:00 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
59	58:00 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04
60	59:00 1/5	H. S. Harkness	60-H. P. Mercedes	Elkwd, N. J. Aug. 18, '04

*Intermediate mile—Barney Oldfield, same car, Los Angeles, Cal., Nov. 29, 1903, made 55 seconds in mile trial.

EDITOR'S NOTE—This table was carefully compiled especially for Motor Age, and is corrected up to date.

MIDDLE WEIGHT (881 to 1432 pounds) GASOLINE CARS

MILES.	TIME.	HOLDER.	CAR.	MEET.
1	0:59*	M. G. Bernin	40-H. P. Renault	Empire, N.Y. July 18, '04
2	2:02 3/5	Joe Tracy	40-H. P. Renault	Empire, N.Y. Sept. 24, '04
3	3:02	Joe Tracy	40-H. P. Renault	Empire, N.Y. Sept. 24, '04
4	4:01 3/5	Joe Tracy	40-H. P. Renault	Empire, N.Y. Sept. 24, '04
5	5:01	Joe Tracy	40-H. P. Renault	Empire, N.Y. Sept. 24, '04
6	6:01 2/5	Joe Tracy	40-H. P. Renault	Empire, N.Y. Sept. 24, '04
7	7:01 3/5	Joe Tracy	40-H. P. Renault	Empire, N.Y. Sept. 24, '04
8	8:02 1/5	Joe Tracy	40-H. P. Renault	Empire, N.Y. Sept. 24, '04
9	9:02 1/5	Joe Tracy	40-H. P. Renault	Empire, N.Y. Sept. 24, '04
10	10:01 2/5	Joe Tracy	40-H. P. Renault	Empire, N.Y. Sept. 24, '04

*Made in separate mile trial.

LIGHT WEIGHT (551 to 881 pounds) GASOLINE CARS

MILES.	TIME.	HOLDER.	CAR.	MEET.
1	1:00 4/5*	Frank Kulick	20-H. P. Ford	Providence Sept. 10, '04
2	2:05	Frank Kulick	20-H. P. Ford	Providence Sept. 10, '04
3	3:06 2/5	Frank Kulick	20-H. P. Ford	Providence Sept. 10, '04
4	4:07 4/5	Frank Kulick	20-H. P. Ford	Providence Sept. 10, '04
5	5:09 4/5	Frank Kulick	20-H. P. Ford	Providence Sept. 10, '04

*Intermediate mile—Time of first mile of above records, 1:04 1/5.

STEAM

MILES.	TIME.	HOLDER.	CAR.	MEET.
1	0:57 4/5*	Louis S. Ross	10-H. P. Stanley	Providence Sept. 10, '04
2	2:05 3/5	Louis S. Ross	10-H. P. Stanley	Providence Sept. 10, '04
3	3:05 3/5	Louis S. Ross	10-H. P. Stanley	Providence Sept. 10, '04
4	4:05 4/5	Louis S. Ross	10-H. P. Stanley	Providence Sept. 10, '04
5	5:08 3/5	Louis S. Ross	10-H. P. Stanley	Providence Sept. 10, '04
6	7:22 2/5	J. L. Hedges	White	Cleveland Sept. 5, '03
7	8:39	J. L. Hedges	White	Cleveland Sept. 5, '03
8	9:51	J. L. Hedges	White	Cleveland Sept. 5, '03
9	11:05 1/5	J. L. Hedges	White	Cleveland Sept. 5, '03
10	12:20 4/5	J. L. Hedges	White	Cleveland Sept. 5, '03

*Intermediate mile of another race—Time of first mile, 1:05 1/5.

ELECTRIC

MILES.	TIME.	HOLDER.	CAR.	MEET.
1	1:13 3/5*	D. Chisholm	Baker	Cleveland Sept. 5, '03
2	2:35 2/5	D. Chisholm	Baker	Cleveland Sept. 5, '03
3	3:53	D. Chisholm	Baker	Cleveland Sept. 5, '03
4	5:11 1/5	D. Chisholm	Baker	Cleveland Sept. 5, '03
5	6:29 3/5	D. Chisholm	Baker	Cleveland Sept. 5, '03
10	17:58	W. C. Baker	Baker	Detroit Oct. 24, '02

*Intermediate mile—First mile, made in 1:21 4/5.

A PRETTY FRISCO STORY

San Francisco, Cal., Sept. 20.—Last month the two daughters of E. W. Hopkins, Mrs. Gus and Mrs. Will Taylor, who are great motor enthusiasts, were warned across the bay of rapid travel. Last week, in Marin county—where the cheerful motto of the constable seems to be, "If you can't catch 'em, shoot 'em," four merry society girls with Ethyl Hager at the wheel of a big car simply tore up the turf between two stations for full 2 miles. Nothing so spectacular and exciting ever happened around San Rafael, and these daring motorists raced the machine with an electric car. They had missed the train for San Francisco, at the San Rafael station, when Miss Hager suggested to race the train to the next station, San Anselmo. When the train came to a full stop at the station the auto dashed up in time to disgorge its gay but breathless burden.

Farmer Thomas Roy's team of honest horses was frightened by the dashing automobile and he reported the case to the constable. Constable George Agnew of San Rafael is determined to enforce the speed law governing the rate at which automobiles may travel along the roads in Marin county. Some one had to be punished. Arrest the young women? Forbid the thought! But the great red automobile had violated the law.

The constable found a way out of his difficulty. He saw the number of the machine as it sped by on its wild race with the train and found out that James Green is the holder of the county license to run automobile No. 67. And in consequence James Green was forced to pay a fine of \$10 because Miss Helen De Young and Miss Ethyl Hager drove a red automobile at an unlimited speed of which Green is the owner.



FELIX FROGER IN THE 70-HORSEPOWER PANHARD

to give. The results of the two heats were disastrous to all of the back markers but the Renault, which just managed to win a close third place from the Thomas Mercedes, the scratch car. Paul Sartori, 24-horsepower Fiat, 1:20, beat Charles Soule, 24-horsepower Pope-Toledo, 1:15, by a quarter of a mile. A. E. Morrison, 24-horsepower Peerless, 1:15, was third a hundred yards back. Joe Tracy, 30-horsepower Royal Tourist, 25 seconds, beat Frank Kulick, 20-horsepower Ford, 10 seconds, by 10 yards. Rodney Peerler, 10-horsepower Autocar, 3:15, finished ahead of both Kulick and Tracy.

A. J. Seaton, 15-horsepower Buckmobile, to whom had been given a start of 4:16, won the second heat by half a mile or more. A. S. Lee, 24-horsepower Pope-Toledo, 1:15, was second, and Joe Tracy, driving this time the 40-horsepower Renault with a start of 8 seconds over E. E. Hawley, piloting the 60-horsepower Thomas Mercedes, was third an eighth of a mile ahead of the German car. The Buckmobile's time was 8:22%.

Sartori won the final by 100 yards in 8:02%. Lee was second in 8:06, a furlong ahead of Seaton, who beat Morrison 10 yards.

A quintette of little fellows faced the starter for the Yonkers cup at 5 miles for cars listing at \$1,000 and under. Rodney Peeler, Autocar, won easily by 300 yards from R. M. Alexander, Pope-Hartford, who beat A. J. Seaton, Buckmobile, by 3/8 mile. B. B. Crauford, Autocar, was fourth 275 yards further back. Peeler's time was 8:15%, Alexander's 8:34% and Seaton's 9:16%. Peeler's intermediate times were 1:43, 3:22, 5:00, 6:37%.

During and after the races Walter Christie gave his new double engine car some brisk spins around the track. It will be sent for the records at Ormond. There is a bare chance that another meet may be run at the Empire track on election day. If not, the international meet at Brighton Beach on October 22 will wind up the metropolitan track season.

MOTOR AGE

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Developments in the automobile track racing game this summer have demonstrated the need of the establishment of a grand circuit of meets. Hitherto no distinction has been officially made among different kinds of meets.

It has been only by common acceptance that some meets have been local and others national affairs.

This lack of distinction has resulted in a multiplicity of applications for sanctions to hold race meets in large cities on the same dates. There is no clause in the racing rules providing against granting sanctions to different promoters for the same dates and confusion has been but natural.

There would be nothing undesirable in the holding of several meets in different parts of the country on the same dates were it not for the fact that in the west there are few or no amateur racing men who have cars fast enough to provide record-time racing.

The eastern amateurs cannot very well afford to go west at considerable expense for one of these meets, and hence the western promoter is compelled to depend upon professional drivers to furnish the fast events necessary to draw the crowds.

In this condition lies the undesirable confusion. There are not enough professionals to supply two or three meets at the same time with first-class racing. Consequently they are doubtful factors, as they are inclined to be high-handed in making arrangements with meet promoters and disposed to hang off with view to working the game for the greatest amount of money obtainable for their appearance.

Only this week Barney Oldfield virtually made arrangements through his manager to appear at both the Pittsburg and Chicago meets of Friday and Saturday and considerable official pressure had to be brought to bear in the case before he could be definitely relied upon to appear at the Chicago meet, with whose promoter he had first negotiated.

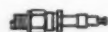
Such a condition is good neither for the sport nor the professional drivers themselves. It tends to throw both into disrepute. A grand racing circuit properly established by the American Automobile Association would terminate it.

By a grand or national circuit plan important meets could be scheduled for large cities and excellent racing talent assured at all of them. It would in no wise conflict with local meets promoted independently of the circuit nor would it interfere with the holding of several meets in different cities on important national holidays, such as the Fourth of July. In the latter case there are always assured enough amateur racing men in the east to fill the programs of at least two big meets. The national circuit or professional meet date could be fixed for a big central western meet, and the northwest, Rocky mountain and Pacific coast territories could each have a local amateur meet, such districts not being convenient for grand circuit affiliation in any case.

With a grand circuit in full swing the evil of mixed dates would not only be avoided but it is likely that better racing would be provided at all meets. The professionals could follow the circuit at less expense than that necessary to make uncertain jumps to and from headquarters and different meets and would soon get into a racing fervor that would stimulate the sport. A certain chain of quickly following meets might be arranged at the height of the season which would allow eastern crack amateurs to swing around the circuit at a fair expense and thus appear at a number of meets which it would be impractical to attend when forced to jump to each from New York or Boston.

Also the establishment of a grand circuit would naturally render necessary a little more business-like general management of the sport by the controlling body, and would thus tend to advance all of the interests involved.

The establishment of a grand circuit is a good matter for the American Automobile Association to consider before next season's plans are formulated.



The construction of automobiles de luxe is reaching an advanced stage. Hints from different factories show that

CARS FOR ALL THE PEOPLE

next season the trade will be rich in high powered, luxurious, side-entrance touring cars in which a great deal of skill, ingenuity and money will have been spent to create vehicles fit for kings and possible for all who have the price. Will the trade be equally rich in good cheap cars for Mr. Smith and his neighbors?

The foundation of the carriage trade is the great production of wagons of utility and buggies of common adaptability to the needs of the populace—that great army of people whom politicians love before election and swindle afterwards. Sooner or later the automobile trade will reach a point where its prosperity depends upon its success in the production of these same two classes of vehicles.

The people all want automobiles and the people have fixed a common price upon the machine they desire. That price is \$500 and the car need not be a racer or a luxuriously appointed touring car. It need only be a safe, stout, practicable vehicle for ordinary conveyance.

Will the demands of the people be answered?

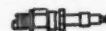
That there is no fiction in this common desire for a \$500 rig was recently well displayed by a Chicago retailer who had a job lot of good runabouts to dispose of. The list price of the cars was \$750. He offered them at

\$700—no sales. He cut them to \$650—no sales. He cut to \$600—a few sales. He made a final cut to \$500 and the cars went out of the store like the proverbial hot waffles.

Probably each purchaser could afford to pay \$600 for a car. That was not the point. In the mind of each \$500 was the price set upon as what it was desired to pay for a good, practical motor runabout.

There is a lesson in this, and the lesson is that were some of the energy used in producing high powered, high priced cars of which there is bound to be a plenty soon, devoted to the creation in large factory lots of very small, simple, stout machines of common purpose and of necessary limitations, it would not be a great while before the public's call for a \$500 vehicle might be answered in a rational, conservative, beneficial manner.

High priced touring cars can never drive the horses off the streets and roads. Low priced cars of general utility and commercial cars can bring about the motor age.



The training school at Aschaffenburg, Germany, for motor car drivers and mechanics is considered in Europe to be

EDUCATING THE OPERATORS

the best of its kind and its course as outlined below might serve well as an example for American clubs, associations, etc., which are planning to conduct such schools. The 10-week course is as follows:

Map-reading—Reading of maps and their abbreviations; automobile and cycle maps will be especially looked after; 1 hour per week.

Sanitation—General anatomy and physiology; lessons in first aid; 1 hour per week.

Physics—Experimental training in mechanics; adhesion and cohesion; specific weight; equilibrium; leverage; power, its creation and effect; frictional resistance; elasticity and solidity; 2 hours per week.

Electrotechnic—Magnetism, induction, transformation, currents, construction of accumulators, charging and discharging accumulators, working of accumulators and motors, electric brakes, electric ignition; 3 hours per week.

Motors—Technecology of motor power; petrol, alcohol, oil; instruction about all gasoline and steam motor parts; working of the motors; their additional apparatuses and parts; steering and handling; ignition, condensation, cooling; 2 hours per week.

Construction—Building a car and making all the needed parts; frame, axle, bearing, wheels, steering mechanism, body, brake arrangement, outfitting of car; lubrication and keeping of car; advice about probable defects and their repairs; motor car laws in different countries and regulations made by local authorities; 3 hours per week.

Workshop practice—Handling and attending to motors and cars, making of repairs on machines and tires; working a lathe, hardening steel, soldering and brazing, and other kind of work; 12 hours per week.

Assembling—Assembling motors and cars and taking them apart; 4 hours per week.

Driving—Driving on country roads and in crowded streets, around curves, street corners, narrow roadways; using the brakes, hill climbing and descending, how to use brakes on them, speed and obstacle driving tests; 8 hours per week.

MOTOR CYCLE CUP RACE PUNCTURED

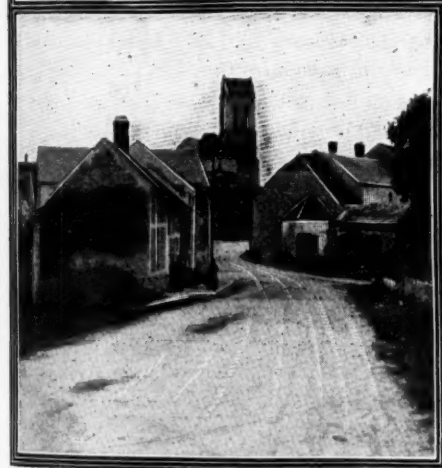


LAMBERJACK LEAVING A CONTROL



INGHILBERT PASSING THE JUDGES' STAND

pounds, with Adolf Mraz, Emil Tolksdorff and Carl Muller, represented Germany; England sent a Quadrant, ridden by Thomas Silver; a Lagonda, ridden by H. P. Harding and a J. A. P., ridden by W. Hodgekinson; a Dansk Humber machine, driven by Michel Petersen, of the Danish Motorcycle Club, represented Denmark in the race.



A TYPICAL VILLAGE ON THE COURSE

Paris, France, Sept. 26—The international motor cycle cup race, organized by the Motorcycle Club of France, which was run Sunday, was annulled. The route had been strewn with tacks, nails and pieces of glass and the competitors had tire troubles in consequence. During the last two important bicycle road races in France tacks and glass were found on many parts of the route, and an investigation showed that it had been done at the instigation

of some of the competing riders. It is believed that rivals of the competing motorcyclists are the culprits and an investigation is being made. Yet there were about 200 gendarmes and several hundred individuals to watch the course.

Demester, on a Griffon, who finished third in the French eliminating race, run September 11, was the first one to finish, although he had his share of punctures and other troubles. There were teams representing Germany, England, Denmark, Austria, Belgium, Holland, and France. Three Griffon machines, ridden by Demester, Lamberjack and Inghilbert, represented France; two Progress motor cycles, of 5-horsepower and weighing 116 pounds each, and one 5-horsepower Brennabor, weighing 116

A SAMPLE OF THE ROAD



A GRADE RAILWAY CROSSING



DEMESTER, THE WINNER, AT A CONTROL

RACES ON AN IRISH BEACH



THE BEACH AT PORTMARNOCK—THE IRISH ORMOND

London, England, Sept. 10—A 2-days' race meet was held near Dublin, Ireland, September 6 and 7 which was so successful that it is still being discussed in automobile circles and may be the forerunner of a great international meet the Irish Automobile Club may arrange for next season.

Excepting the eliminating trials which were run in the Island of Manx, no events on British soil have attracted so much attention this year. It is true that it was somewhat on account of the fact that they were run on the beach at Portmarnock, about 6 miles from Dublin, and that this was the first serious attempt to hold speed trials on this kind of soil. The organizers wanted to find out whether there was an Ormond beach in Ireland. Today they are well satisfied and claim the Irish beach is probably better than the one in Florida.

The velvet strand of Portmarnock, as it is generally termed, is not so long as the Ormond course, but it is more picturesque and has the advantage of being near an important city and of having high sand hills along the land side, which enable the spectators to obtain a beautiful view of the races from start to finish without having to use telescopes. The course is so wide that half a dozen cars can race abreast and being about 6 miles long affords plenty of starting and finishing.

In order to insure a good start, the race committee decided to lay several yards of planks at the start and this was found to be a great help in the standing start events. It was merely a test, having never before been tried, but was pronounced entirely satisfactory.

After the big racers had had their little game of war and even after the heavy touring cars had tried for superiority the track was as smooth as if no cars had traveled on it.

More than 100 contestants took part in the various races, but there was keen disappointment owing to the absence of S. F. Edge, Charles Jarrott, Mark Mayhew and Miss Daisy Hampson, who was to drive a 60-horsepower Mercedes car. The attendance on the first day was estimated at 6,000. Mostly heats were run off, the finals being carried over for the following day, when fully 10,000 spectators came from Dublin and many other localities. The events each day were divided into a motor cycle section, a touring section and a racing section, with sub-divisions into classes, according to price and passenger-carrying capacity.

The first event run Tuesday was for touring cars costing £200 or under, and carrying two passengers. There were three starters and H. Sturme's 10-horsepower Duryea won by nearly $\frac{1}{4}$ mile from M. Chancellor's 6-horsepower Wolseley and by nearly $\frac{1}{2}$ mile from Major Thornhill's car of the same make. The 1 mile was covered in 1:41 4-5. In the second heat J. Edwards' 6-horsepower de Dion easily outran H. B. Hill's 6-horsepower de Dion car, winning in 2:32 $\frac{1}{2}$.

Three heats were necessary to run off the second event, for touring cars costing more than £200 and less than £400, in which four passengers were carried. In the first heat a 12-horsepower Darracq belonging to Hugh Kennedy defeated an 11-horsepower Clement, owned by S. T. Robinson, by nearly $\frac{1}{4}$ mile. Through some misunderstanding no time was taken. In the second heat there were three starters, and H. Sturme won his second race, his 12-horsepower Duryea winning easily by more than 200 yards from Malcolm Grey's 10-horsepower Wolseley and from the 10-horsepower Argyll belonging to W. R. McTaggart, which was about 300 yards back of the winner. The time was 2:08. In the third heat only one competitor lined up; it was Frank Churchill, in a 14-18-horsepower Hallamshire, and he covered the mile in 2 minutes flat.

H. Sturme's 15-horsepower Duryea had trouble a few yards after the start of the first heat for cars costing more than £400 and less than £600, and carrying four passengers. A 15-horsepower Darracq, belonging to A. Huntley Walker, finished the race alone, in 2:05. There were but two starters in the second heat and the result was protested by A. Rawlinson, who drove a 15-horsepower Darracq, because

he claimed A. Govan, who drove the winning car, a 16-horsepower Argyll, had two children as passengers instead of two men. Govan's time was 1:49 $\frac{1}{2}$.

There were nine starters in the four heats of the race for cars costing more than £600 and less than £1,000, and carrying four passengers. Thomas L. Plunkett's 28-horsepower Daimler won the first heat in 1:47, the other cars being a 28-horsepower Daimler and a 16-horsepower Martini. In the second heat Percy Martin's 28-horsepower Daimler ran away from the two M. M. C. cars, winning in 1:26 $\frac{1}{2}$. The third heat was a close contest and was won by 20 yards by A. H. Walker's 30-horsepower Darracq from the 30-horsepower Darracq car driven by A. Rawlinson. The time of the winner was 1:40 $\frac{1}{2}$. S. F. Edge's 20-horsepower Napier was the lone starter in the fourth heat and the driver covered the mile in 1:22 $\frac{1}{2}$.

The last event of the day for touring cars was a free-for-all race, but the cars had to carry five passengers. A 60-horsepower Mercedes and a 28-horsepower Daimler lined up in the first heat and to the surprise of everybody the big German car had very much difficulty in winning by a few yards. The car was driven by its owner, A. Lee Guinness, who ran the mile in 1:24 $\frac{1}{2}$. A. Rawlinson in a 45-horsepower Darracq started alone in the second heat, covering the distance in 1:19 $\frac{1}{2}$, the best time of the day in the touring section.

There was only one event for racing cars. The first was for the Irish automobile challenge cup, which was held by J. E. Hutton, and it was for cars weighing less than 2,200 pounds. The first heat was called off on account of a false start. This was between C. S. Rolls in a 100-horsepower Mors and A. Rawlinson's 40-horsepower Darracq. A. Lee Guinness in an 80-horsepower Darracq defeated J. W. Stocks, who drove a 70-horsepower Napier, in the second heat. It was a close finish and the mile was run in 59 $\frac{1}{2}$ seconds. A. E. MacDonald, in Edge's new six-cylinder Napier, broke the record for the day by doing a mile in 58 seconds and defeating M. Egerton, who drove a 60-horsepower Panhard car in the third heat.

The only event in which the final was also run Tuesday was the mile handicap for residents of Ireland for the 10-guinea cup. In the first heat the 28-horsepower Daimler, with 40 yards handicap, won by 100 yards in 2:07 $\frac{1}{2}$ from a 6-horsepower Wolseley, which had 500 yards, a 20-horsepower M. M. C. which had 125 yards, and a 10-horsepower Argyll which had 250 yards. In the second heat a 16-horsepower Argyll with 175 yards handicap won easily in 1:45 $\frac{1}{2}$. The other starters were a 6-horse-



STARTING A HEAVY RACING CAR HEAT

power de Dion with 500 yards, an 11-horsepower Clement with 200 yards and a 10-horsepower Argyll with 250 yards. A 20-horsepower M. M. C. with 125 yards finished first in the third heat in 2:10%. A 10-horsepower Wolseley with 250 yards and a 10-horsepower Argyll also with 250 yards handicap were second and third. In the final the 28-horsepower Daimler driven by Thomas L. Plunkett won by 100 yards in 1:36%.

There were two motor cycle events. The first was for machines weighing up to 150 pounds without fuel and accumulators, and was for amateur drivers only. The distance was a mile, standing start. F. A. Wallen on a 3-horsepower Triumph won the first heat by over 100 yards in 1:38%, a 2¼-horsepower F. N. was second and a similar machine third. An F. N. motor cycle driven by C. B. Franklin was the winner in the second heat while a 2½-horsepower Triumph was second, 250 yards back. The final was won by Franklin in 1:35%. The race for machines weighing up to 170 pounds without fuel and accumulators was also easily won by Franklin. The mile standing start was run in 1:32%. The events of the second day were all interesting. Franklin again won both motor cycle contests and proved that he was a remarkably clever and skillful driver of the little two wheelers. The first of the motor bicycle races was for machines weighing up to 150 pounds, and after winning his heat by 200 yards in 1:30%, Franklin won the final by 100 yards in 1:32%. The second race was motor cycles of any weight, and after



START OF MOTOR CYCLE RACE

winning his heat by over 100 yards Franklin drove the little machine to victory in the final in 1:29%.

The final of the race for two-seated cars costing £200 or less, was a runaway affair for the 10-horsepower Duryea, which defeated the 6-horsepower de Dion by ½ mile in 1:53%. Frank Churchill in the 14-18-horsepower Hallamshire won the final of the race for cars costing more than £200 and less than £400 and carrying four passengers. The time was 1:57%. There were two 15-horsepower Darracqs in the final of the race for cars costing more than £400 and less than £600. A. H. Walker won from A. Rawlinson by 30 yards in an exciting finish and covered the mile in 1:58%.

In the first heat of the race for cars costing over £600 and less than £1,000 Percy Martin's 28-horsepower Daimler won from the 20-horsepower Napier in 1:24%. The second heat was between T. L. Plunkett's 28-horsepower Daimler and A. H. Walker's 30-horsepower Darracq.

From start to finish it was a neck-and-neck contest, neither driver being able to gain much. In the last few yards the Daimler gained a few inches and won by a tire's length in 1:39%. The final was won by P. Martin in a 28-horsepower Daimler in 1:31%. Plunkett was second.

The 28-horsepower Daimler driven by Plunkett won the Goff challenge handicap at a mile in 1:32%, while a 6-horsepower Wolseley was second, 10 yards back. The final of the free-for-all race, the cars to carry five passengers, was won by the 60-horsepower Mercedes driven by Lee Guinness in 1:19%. A 40-horsepower Darracq was second.

The events for racing machines were again of great interest. The race for the Irish automobile challenge cup was run over and in the first heat the 100-horsepower Mors car driven by Rolls won from the Gordon Bennett Darracq racer by 50 yards in 57% seconds. McDonald in the six-cylinder Napier had no difficulty in leaving the 80-horsepower Darracq driven by A. Rawlinson about 250 yards, covering the mile in :56%. The final was a close race the Napier winning by less than 20 yards from the Mors. Unfortunately the time of this event was not taken.

Two Darracq light racers lined up for the challenge cup race for light racing cars, which was won by the car driven by A. Rawlinson. Several record trials were made. A. Rawlinson in a 40-horsepower Darracq covered a flying kilometer in 28% seconds, or an average speed of 77½ miles per hour.

GOSSIP OF THE SPEED MERCHANTS

AMATEUR SPORT AT DENVER

Members of the Colorado Automobile Club, of Denver, Colo., gave an impromptu race meet at the Overland park track. A 10-mile race was won by Claude Boettcher, in a Peerless, in 15 minutes. Laurence Philips in a Peerless won a 5-mile race in 10:25. The third race was also a 5-mile contest, in which three Winton cars and a Knox lined up. McElveen, in a Winton, won in 10:35. John McMurty in an Autocar won the fourth race, covering the 5 miles in 9:27. The last race was between a Winton and an Autocar, but gave no result, as both contestants stopped at the end of the fourth mile thinking they had run 5 miles.

WHICH IS "JUNK"?

Two Providence, R. I., men, W. H. Draper and G. H. Willey, are fixing up an automobile race among themselves which will settle a vexed question. Mr. Draper has a Winton touring car, Mr. Willey has a Rambler, and each has been telling the other that his machine is a piece of junk. On October 15 the Providence Driving Club, composed of men who are horse-owners, is to have a series of horse races at Narragansett park, and the race between the two automobiles has been set as a feature in that event. Each man will drive his own machine and among the members of the club the betting is very active as to the result.

DIVIDED THE GLORY

Automobile races were held in Lowell, Mass., a few days ago in connection with the Mid-dlesex fair. M. Ross, in a Stanley steamer, won the 5-mile race for steamers in 9:00%. The 5-mile race for cars of 16-horsepower or over was won by A. H. Morrison, in a Peerless, in 9:50% from Kenneth Skinner, in a de

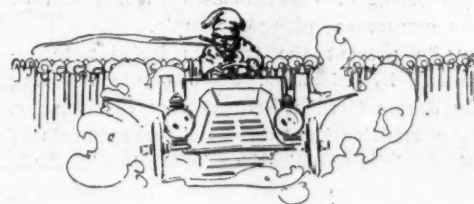
Dion-Bouton. The 5-mile race for cars of 16-horsepower or under was won by Skinner in 10:40%. M. Gilmore in a Rambler was second. The 5-mile free-for-all was won by A. H. Morrison in a Peerless in 8:23.

UP SEMMERING HILL

The annual Semmering hill-climbing contest, the most important Austrian automobile event, was to have taken place September 25 and 26. Gray Dinsmore entered a 90-horsepower Mercedes, which Willy Poge was to drive; another Mercedes of similar horsepower was to be driven by Hermann Braun; an 80-horsepower Darracq, a 75-horsepower Fiat, a 100-horsepower Panhard, a Gobron-Brillie and other fast cars were entered, while about twenty-five motor cycles, mostly of German and Austrian manufacture, were to compete.

WESTERNERS LIKE 999

Jed Newkirk and the 999 racer pleased several hundred people who went to see the first automobile race meets given in Des Moines and Dubuque, Ia. In the former locality Newkirk gave a 3-mile exhibition, covering the distance in 4:18½ and started scratch in the 3-mile handicap, which he won in 4:26. The local races were won mostly by Cadillac machines, while Locomobile, Rambler and Franklin cars were well up in front. At the Dubuque meet only a 5-mile exhibition was given, which the old Ford racer completed in 6:07.



BROKE WESTERN ROAD RECORD

Last Sunday, September 25, Herman Hulman, Jr., with a Winton touring car, broke the former record from Chicago to Terre Haute, Ind., by 1 hour in covering the 242 miles in 14 hours 25 minutes. Hulman expected to make the journey in 12 hours, but the condition of the roads were not such as to permit very fast driving, yet the average of 17 miles an hour was maintained during the trip.

KANSAS STATE FAIR

In connection with the Kansas state fair automobile races were given in Topeka on the last day when the attendance was nearly 8,000 people. In the 5-mile free-for-all race D. B. Woodward, in a Franklin, had trouble in stopping his machine. The event was won by H. E. Lyman, in a Rambler, in 8:23. The second mile was covered in 1:37, the fastest mile ever run in Topeka. J. M. Padgett, in a Stevens-Duryea, won the 3-mile race in 5:54 and L. B. Wyman, in an Oldsmobile, won the 2-mile event, in 5:31½.

ST. LOUIS DATE FIXED

Sanction has been granted for a 2-days' meet to be held in St. Louis, Mo., October 22 and 23. The management has secured every available racer of reputation, including Oldfield, Webb, Fisher, Kiser, Tyler with the Royal, and Kulick with the Ford racer. The local clubmen are enthusiastic. The meet is the dominant subject of conversation in the St. Louis garages. It will be under the management of Judge George B. Sidener, and R. W. Slusser will be referee. Arrangements have been made to guard against the possibility of accidents of any kind.

VANDERBILT RACE DETAILS

**Thirty-two Mile Triangle Put in Fine Shape and Sprinkled with Oil
—Grand Stand and Telephonic Accommodations Elaborate—
Drivers Already on the Course Practicing**

New York, Sept. 27—The eyes of automobilism are now centered on the 32-mile triangle on Long Island, over which on October 8 America's first international road race will be run. The grand stand is in course of erection. Sprinkling carts are pouring Texas oil over 28 miles of the course. Each day the triangle is covered by dozens of cars carrying interested enthusiasts and drivers in the race, who go on it in touring cars to familiarize themselves with it. All pronounce the oiling a success and for the first time in the history of road racing the racers will have a dustless course to negotiate. The sections of the road recently under construction and repair are nearing completion.

"The course is all right," said Charles Soule, of the Pope track team. "I have been over it and I don't see what is to prevent 60 miles an hour going. I don't think the contestants will have to slow down around the curves as much as has been prophesied. The oiling has done away with dust completely."

Of the visiting drivers George Heath, the Ardennes circuit winner, who will drive a Panhard, has been here over a week. Albert Clement arrived Sunday with his car and has gone with it to the quarters prepared for him by Sidney B. Bowman at Mineola, near the course. On the same steamer came the three Panhard racers.

It now transpires that Gabriel, most daring and devilish daredevil of the foreign racing bunch, is to be a competitor, driving a de Dietrich. It was he who was first at Bordeaux in the ill-fated Paris-Madrid race. Gabriel finished fourth in this year's French elimination trials and so missed the team. Gabriel was scheduled to sail last Saturday and on the same trip will be Teste and Tarte, two members of the Panhard team.

Charles Schmidt will be at the course on Thursday with the Gray Wolf. The Packard Motor Car Co. has leased a house on the Jericho and will install a force of mechanics from the factory. All the tire companies will establish frequent repair stations.

H. H. Lyttle left Toledo, O., Sunday night last for the Vanderbilt cup race. He shipped his Pope-Toledo car by rail, while he took a boat as far as Buffalo, thence by rail to New York.

The cars of two entrants are reported to have met with unlucky mishaps. William Wallace last week broke a wheel and the dashboard of his Fiat by a collision with a tree in trying to avoid running into a wagon. The gear case on the Mercedes S. B. Stevens, Jr., is to drive cracked last week and a new one was cabled for, which is expected to reach here in time for the race. Mr. Wallace was outward bound to his testing ground and while going along Commonwealth avenue in Newton a heavy team, loaded with lumber, swung right across the road, threatening destruction to both man and vehicle. Mr. Wallace steered the huge machine around the front of the horse, but the space was so narrow that in order to escape the horse and its driver, who was standing at its head, he had to run too close to a tree.

The impact took off both right wheels, broke the spokes, destroyed the differential and both sprockets.

All the rooms at the Garden City hotel have already been reserved for the night before the race and the assignment of applicants to neighboring cottages has begun. The roads leading to the course will be shut off at daylight and those who intend to view the race from automobiles would do well to get within the triangle during the night and so be able to drive from point to point and see the contest from different aspects.

The drawing for time and order of starting will take place at the Automobile Club of America next Saturday night. Chairman Pardonington said today that he was not ready to say yet whether the drawing would be by nations and then by individuals or by individuals only.

The racing board chairman has issued a bulletin. In it he sets forth the fact that the oiling of the course will require 90,000 barrels of oil and cost \$5,000 for a treatment of 28 miles, twice over. The grand stand receipts will go toward this fund. There are 80 boxes, seating six each, at \$50, and 360 seats at \$5. There have been sixty-seven boxes and 225 seats already sold.

A subscription fund has been started to meet the deficit in the cost of the race. The following subscriptions have been received so far: W. K. Vanderbilt, Jr., \$200; Mrs. W. K. Vanderbilt, Jr., \$100; and Long Island Automobile Club, Mrs. O. H. P. Belmont, George Arents and H. M. Swetland \$50 each.

Among those who have bought boxes are M. J. Budlong, E. R. Thomas, H. L. Bowden, P. F. Collier, Clarence Postley, George Isham, Scott, F. C. Havemeyer, H. C. Frick, Albert C. Bostwick, Commodore F. G. Bourne, W. Gould Brokaw, Howard Gould, O. H. P. Belmont, Mayor George B. McClellan, Colonel George B. Pope, Harlan W. Whipple, W. C. Temple, Windsor T. White, James L. Breese, George Arents, Jr., Isidore Wormser, Jr., Frank H. Croker, George Farrington, Mortimer L. Schiff, Sidney B. Bowman, R. E. Jarrige and Hollander & Tangeman. The executive committee of the N. A. A. M. is to attend in a body, arrangements for three boxes being made by S. A. Miles, general manager.

In his bulletin the racing board chairman says: "To avoid speculation in these seats and boxes, not more than two seats nor more than one box will be sold to an individual, unless he is known to be a member of some club in the A. A. A. affiliation, and is vouched for by a member of the commission for 1904."

"Seats and boxes will all afford a commanding view of the start and finish, the occupants enjoying the benefit of the immediate announcement of times made each lap, and of any occurrences along the route."

"To prevent the troubles incident to reporting by telephone, which occurred during the James Gordon Bennett race in Germany, the committee has placed the arrangements of telephonic communications in the hands of the New York and New Jersey Telephone Co.,

which has assigned an engineer to work out the details. The timers are to have their own telephone system, connecting the official stand with the timers located at the two controls, one at Hicksville and the other at Hempstead. In addition to this elaborate system, the judges are to have a system for their own use connecting with various points on the circuit, particularly at the four turns, Jericho, Plain Edge, Queens-Hempstead and Queens-Jericho. The judges' and checkers at these points are to be provided with portable telephones, specially designed, through which they will be enabled to instantly report to the judges and referee the passage of cars and any other matters which require official action or ruling. These systems will require about 500 miles of wire and a large number of telephone instruments, especially adapted to meet the needs of the commission and officials. To guard against breakdowns, four inspectors and repairmen mounted on motor bicycles are to be located, one at each of the four turns.

"The course immediately in front of the grand stand and official pavilion is to be kept absolutely clear. No person but the starter and the two technical advisors will be allowed to approach any car before it starts. This precaution is taken to prevent the possibility or accident in the presence of the occupants of the stand and boxes. To avoid confusion, but one car will be brought up to the tape at a time, which, as soon as it shall have been sent away, will be replaced by another, and so on until the last one shall have departed. Upon the departure of the last starter the space in front of the stand for a distance of about 400 feet will be kept *entirely free of pedestrians*. None but officials will be allowed to cross the course, and they only in proceeding to one end or the other of the reserved space. This rule will be strictly enforced by building a fence, supplemented by deputy sheriffs, vested with full authority to arrest."

"A portion of the official pavilion has been reserved for representatives of the daily and trade press, one representative from each being provided with a brassard, to be worn on the left arm, which will give him access to the pavilion."

"All officials connected with the conduct of the event will be designated by a brassard, worn on the left arm, as follows: Members of the commission and the referee, who will be William K. Vanderbilt, Jr., blue; judges, red; timers, starters, etc., green; press, white. In the case of press representatives, the name of the publication represented will appear. These are all to be provided by the racing board."

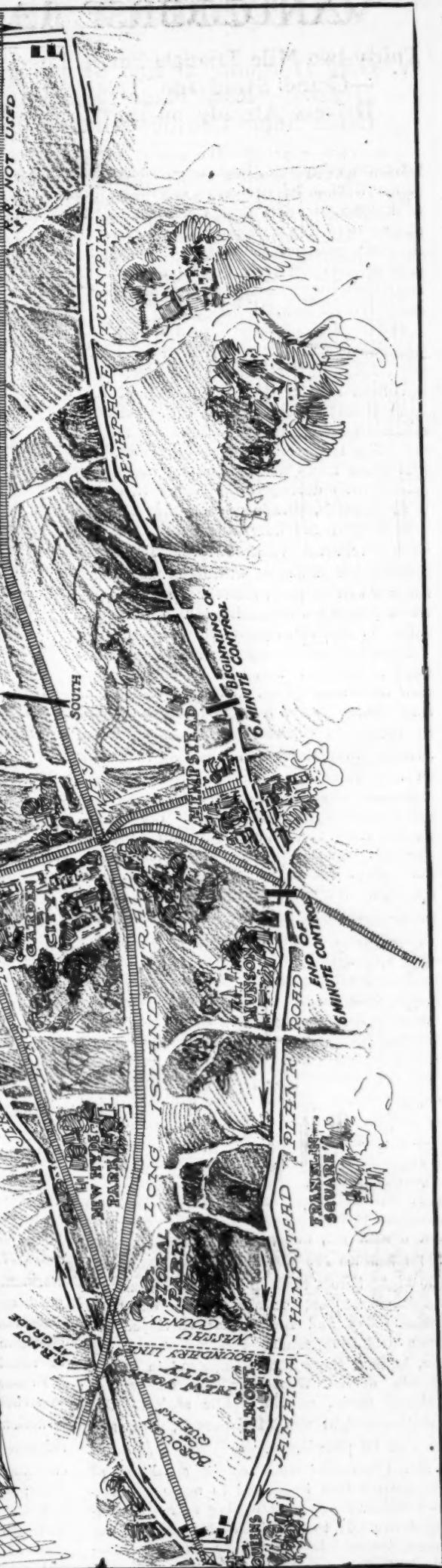
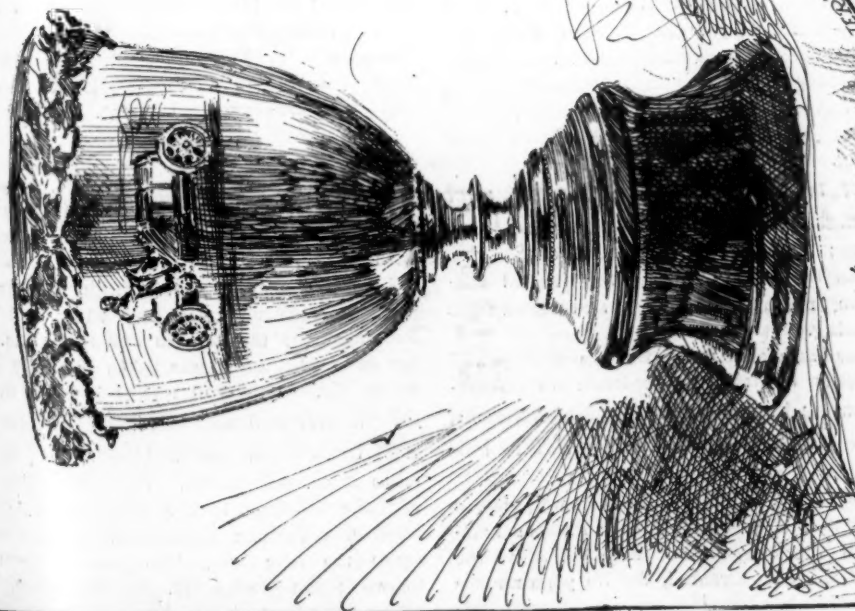
"Spectators expecting to reach the stand after the start, 6 a. m., must, if in cars, or other vehicles go from Jamaica by way of the Merrick road to Rockville Centre or Freeport, thence north to Hempstead, through the 6-minute control at this point, thence to Garden City, Mineola, pass the fair grounds and thence to Westbury. The stand and boxes are within a mile of the railroad station at Westbury; a road runs close to the stand. Arrangements to pack cars in a vacant lot near by are being completed."

Posters are now up all over Nassau county telling the citizens of the race and warning them to keep their domestic animals tied up during the race and to keep themselves off the course.

COURSE FOR THE FIRST CONTEST FOR THE "WILLIAM K. VANDERBILT JR., CUP" OCTOBER 8th 1904

- RED BANNER RIGHT HAND SIDE OF ROAD
100 YARDS FROM TURN TO THE RIGHT
- RED BANNER FOR RIGHT TURN NEAR CORNER
- GREEN BANNER 100 YARDS FROM R.R. CROSSING
- WHITE BANNER STRAIGHT AHEAD INTERSECTION
- BEGINNING AND END OF CONTROLS
- ALL THE TURNS ARE RIGHT TURNS

TOTAL LENGTH OF COURSE - 30.24 MILES
LENGTH OF 3 MINUTE CONTROL - 0.40
LENGTH OF 6 MINUTE CONTROL - 1.40



CUP COURSE IS EXCELLENT

W. Gray Dinsmore at first Skeptical Now Pronounces It an Ideal Highway—Road Made Famous In Early Times—Official Scales Cause Some Caustic Criticism By Contestants

Garden City, L. I., Sept. 26—Upon the line of the William K. Vanderbilt cup course, soon to become for the third time historic, the owners of racing cars and their drivers and the great machines are daily gathering, going into quarters and preparing for the most tremendous battle which American automobile dom has ever seen.

The scene is a most beautiful one from the windows of the Garden City hotel, which is practically in the center of the course. In all directions may be seen the estates of those whose names are synonymous with wealth and social distinction and who have for the second time made Nassau county famous—the first fame being given to it by the British officers, who during revolutionary time used it as barracks, parade ground, race course.

It is past the dooryards of the wealthy, chiefly, that the Vanderbilt course sweeps—sometimes a ribbon of white macadam, sometimes a belt of gray, sometimes a shady lane where people are wondering if two racing machines at speed can pass.

When the course was first announced there were many who shrugged their shoulders. Now these men agree that it is the best which could have been selected on American soil. Of these is Clarence Gray Dinsmore, whose 90-horsepower Mercedes is the only racer now on the course and testing the roads. Mr. Dinsmore, when he came here 3 weeks ago, had many criticisms to make of the circuit. To one fresh from the Circuit des Ardennes and the Homburg course it seemed crude, and full of difficulties. Today Mr. Dinsmore recanted. He has seen sections of the road under the hands of the road builders, the oil sprinklers at work, a grandstand growing as if by magic by the roadside. Day by day he has seen that America can rise to the occasion with a zest and earnestness which discounts the slow-molded German or the habit-ridden Frenchman. In conversation with the writer he admitted that we were making a real cup race course of the Vanderbilt triangle. Others who have watched the work in progress bear witness to the truth of Mr. Dinsmore's conclusions.

Incidentally Mr. Dinsmore offset his favorable comments by some criticisms of the official scales. These scales are at the garage attached to the Garden City hotel. They are not official yet, but will be October 7, when the machines are weighed in and sealed for the night before the cup race. Mr. Dinsmore casually weighed the Mercedes on these scales today and found that it tipped the beam at 2,300 pounds. Amazed at this figure, he sent the car to Hempstead in charge of his driver, Werner, where he had it weighed again, on the public scales. This time the weight was 2,237 pounds, a discrepancy of 63 pounds.

Mr. Dinsmore remarked in speaking of this matter that it seemed to make a difference whether one used buying scales or selling scales. If the official scales were selling scales, he said he wanted to know it. The matter will of course be put up to Chairman Pardington of the racing board, and the re-

sult is awaited with some degree of interest.

On Saturday, at the Garden City hotel, will occur the drawing of lots for numbers, which carry with them the order of the start. This will be an interesting event and one of moment to the drivers, for if the cars are sent away at three-minute intervals as planned, the first will have nearly completed its first lap before the last will have started—a pacing handicap which will amount to much.

Tomorrow begins the interesting work of oiling the course. Some figures of this contract are worthy of notice as indicating the magnitude of the undertaking as a whole. About twenty tank-cars of crude oil will be sent to various points where their contents will be pumped into sprinkling carts. All parts of the road will be gone over, some of them several times. About 115,000 gallons will be used on the 30 miles of the course, 3 or 4 miles a day being covered. It is believed that this oiling will be effective in laying the dust for 2 months after the race.

Today the grand stand at Westbury is complete as to frame work, and the flooring is being placed upon it. It is 200 feet in length, will seat 400 people exclusive of the eighty boxes holding six each, which are being built across its face, and commands the road for a mile in either direction. It is directly across from the private race-course which is a part of the beautiful Hitchcock estate, and broad meadows on either side provide plenty of room for spectators' automobiles.

Work is also going forward steadily on the new road at the turn to the westward on the Bethpage pike and on the telephone system which is being specially installed for the race.

ENGLISH TRIAL AWARDS

London, England, Sept. 16—The judges of the recent small car trials have finished their reports and have recommended the award of the following medals: Three gold, three silver and six bronze, and two honorable mentions.

The medals go to the following cars: Gold medals—Wolseley, for general excellence of design, construction, workmanship and hill-climbing; Siddeley, for the same reasons; Swift, for general excellence of construction, workmanship, smoothness in running and hill-climbing.

Silver medals—De Dion, for excellence of workmanship, consistent running, and hill-climbing; Humber, for general excellence and attention to detail; Alldays, for general construction, neatness of design and smoothness of running.

Bronze medals—Brown, for the quality and construction of details; Speedwell, for its construction and performance considered with reference to price; Little Star, for hill-climbing and for construction in reference to price; Oldsmobile, for ease of manipulation and for details of construction; Prosper Lambert, for the design and construction of the parts of the car; Croxted, for its performance and for its construction considered with reference to price.

Honorable mention—Clyde, for low fuel consumption; Mobile, for its general performance as a four-seated vehicle.

The de Dion cars would certainly have been awarded gold medals were it not for the stop which was made by the car driven by Miss Dorothy Levitt. There is also much surprise among motorists over the fact that the Croxted car which made twelve non-stop runs was only recommended for a bronze medal.

The final order of merit of the cars resulting in the award of the different grades of medals was obtained by a system of award of points for comparative merit in the following particulars: Non-stop runs, ease of manipulation, vibration, brake tests, hill climbing, fuel consumption, comfort of passengers and noise.

WHITE MOUNTAIN GATHERING

Fifty owners of cars have been invited to participate in the tours of the White mountains and the banquet at Bretton woods on Saturday. A ball will follow the banquet, which will be graced by the presence of some hundred or more Bradford college girls. The next day there will be a run to Dixville Notch and another run on Monday. Winthrop E. Scarritt, president of the A. A. A.; Colonel Albert A. Pope, the "father of good roads," and Isaac B. Porter, president of the American Motor League, will be among the speakers. Tours have been arranged from New York, Boston, Springfield, Hartford, Providence and Buffalo.

The majority of the leading automobilists of Boston propose participating in the tour and the banquet to be given at the Mount Pleasant hotel. The main body will leave Boston late Thursday afternoon, going direct to Rochester, N. H., for the evening, and on Friday continuing to Bretton Woods, where a fine view of Mount Washington and the Presidential range can be secured. In the party will be W. H. Foss, A. P. Adams, H. W. Knights and the MOTOR AGE man in a Pope-Toledo, Mr. and Mrs. Harry Fosdick in a Winton, George H. Lowe and party in a White steamer, A. E. Morrison and party in a Peerless, E. A. Gilmore and party in a Rambler, F. E. Randall in a Stevens-Duryea, Mr. and Mrs. W. W. Burke in a Columbia, J. H. MacAlman and friends in a Locomobile. Harlan W. Whipple, president of the American Automobile Association, will also make the tour from his home in Andover, and as things now look there will be a fine representation of Bostonians at the dinner and also at the tour through the Dixville Notch on the day following the banquet.

BUFFALO AUTOMOBILE THIEVES

Buffalo, N. Y., Sept. 27—Motor car owners in this city are having considerable trouble with thieves who steal cars and leave them in out of the way places. Within 2 days the police have found two cars which had been abandoned by the persons who took them. The car of J. S. Jacobs was taken from the place where Mr. Jacobs had left it in front of the Star theater and was driven to the corner of East Utica street and Wohlers avenue, several miles from the theater. There the thief had run the machine into a telegraph pole and when a policeman approached to offer assistance the man fled. The car of the well-known piano dealer, H. Tracy Balcom, was taken from its place in front of Mr. Balcom's home on Delaware avenue the other day and

EXPERIENCES OF THE ROAD

ROAD HOGS NUMEROUS

Jesse B. Eccleston, of the Centaur Motor Co., of Buffalo, N. Y., returned home last week from a 2-weeks' tour through the eastern part of New York state and New England in a Packard. Besides having a most enjoyable trip he made an important discovery. Every automobile tourist who has traveled through New York state knows that the road hog still exists and in some cases in a most virulent form in New York state. Mr. Eccleston knew it, of course, and for a few days he had trouble enough with farmers and others who refused to give his machine a part of the road. At last, however, a bright idea occurred to him. He bought a megaphone. Riding in the tonneau most of the way was Rastus Jackson, a very black, bass voiced Ethiopian who went along to remove some of the hard jobs of motor traveling. Rastus took to the megaphone as a duck to water. His long drawn-out Sh-h-h-h directed at the most foolish hen on the road made her take to the weeds under full steam, while the low-toned "Hyah, you, git home, you dawg," sent canines back to the house in a hurry. For use on farmers and others who need warning the megaphone proved most satisfactory. It increased the carrying power of the voice and added a forcefulness which worked like a charm. Mr. Eccleston's advice to tourists everywhere is to buy a small megaphone. He says it is worth ten times its cost.

Traveling only in the afternoon for 14 days Mr. and Mrs. Eccleston covered 1,500 miles. The longest day's run, 143 miles from New York to Springfield, Mass., was done in 7 hours. The average was something more than 100 miles a day. The only accident on the whole trip was the breaking of two leaves of a spring. Not a tire puncture occurred on the journey.

The spring was broken just after the party left Albany on the way home. Mr. Eccleston said today: "We went from here to Albany, to New York, then to several points in New England, including a run through the Berkshire hills. That is God's own country. It was discouraging indeed to strike the New York state roads between Albany and Syracuse after traveling as much as we did on Long Island and in New England. I think those roads west of Albany are about the worst there are and do not wonder that the people on the run to St. Louis sent a protest to Governor Odell.

"We found the people in New England a bit more used to the motor car than some of our own citizens are. The roads in New England are fine, mostly macadam and far ahead of the other roads we struck excepting those between Rochester and Buffalo. We covered more than 100 miles a day on an average and introduced what to us was an innovation. Instead of making up a party at the start for the whole trip, we took up friends along the way and carried them with us for a day or two, then dropped them and took some one else. We found some old friends in Pittsfield who had never owned motors and gave them a 2-day ride. The wife had never been in a car and was a bit afraid, I think, at the start. Before they left us, however, the hus-



band declared most earnestly that he was for motoring hereafter, and he promised to tour to Buffalo in a car of his own next season.

"One incident did me a world of good. Not far from Buffalo we came up behind two horse-drivers. The wagon which was ahead stopped at the side of the road; but the man in the carriage drew up alongside the wagon, stopped and turning around shouted: 'To h— with automobiles.' I darted around the pair, taking the space between the road and the fence easily. The horse attached to the carriage shied as the car went around and when I looked back I found that the rear wheel of the carriage had been turned inside out by striking the rear wheel of the heavy wagon. My 'to h—' friend was in a peck of trouble; but under the circumstances it didn't seem incumbent on me to help him out."

TOUGH TOURING TERRITORY

George H. Graves, of Salem, Oregon, a traveling man for the Harry Una Co., of San Francisco, Cal., was in San Francisco last week and related some interesting experiences he has had, with the White steamer, with which he covers all of the state of Oregon. "A year ago," said Graves, "there were no automobiles in Salem, while now there are fourteen, all being used only for pleasure purposes, except my car. The country, however, is very unfavorable for automobiling, there are no good roads, all are very rough, and the country is extremely mountainous. At first I was afraid to go over the mountains in my car for fear of breaking down, in which case one would be 50 to 100 miles from anywhere. I have had some very hard trips to make during my travels over the state and know it takes a good car to run with success on those roads, which in the summer are covered on the level with dust 11 inches deep. The hardest run I take is from Cottage Grove to Ashland, a distance of about 250 miles, off the railroad and crossing two mountain ranges, with hills almost perpendicular."

COVERED GROUND RAPIDLY

George L. Fleitz, of Detroit, made a fast run from New York to Syracuse, N. Y., in his 35-horsepower Darracq Thursday and Friday of last week. He reached Syracuse Friday night, accompanied by John B. Garneau, of St. Louis, and Alfred J. DuCharme, of Detroit. The party started from New York Thursday morning and Albany was reached at 7 o'clock the same evening. The party was delayed in Albany, so that a start could not be made until 12:30 o'clock Friday. Supper was had at Utica and at 8:30 o'clock a start was made for Syracuse, a distance of 50 miles. The party was at the Yates hotel in Syracuse before 11 o'clock. Mr. Fleitz took the boat from Detroit to Buffalo upon starting east, running the machine from Buffalo to New York.

BUSINESS AND PLEASURE

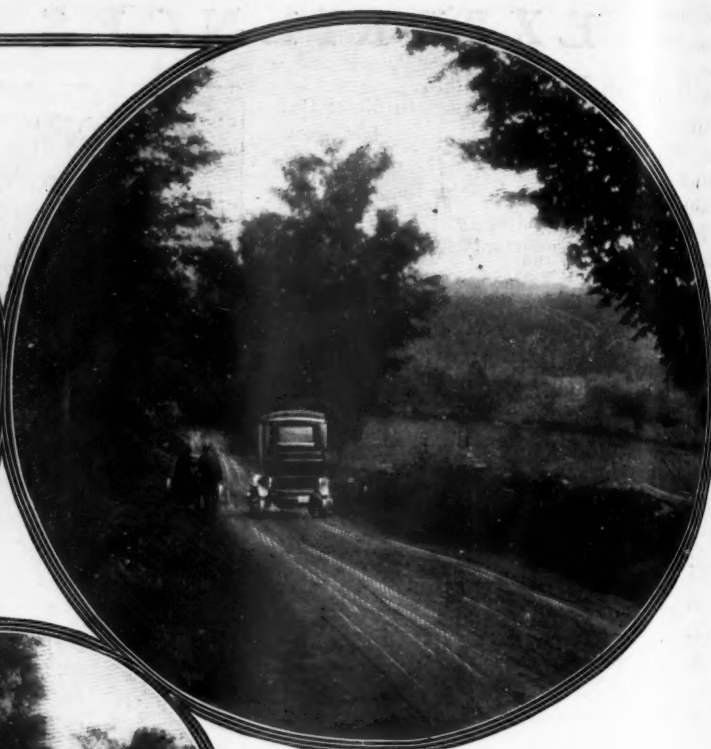
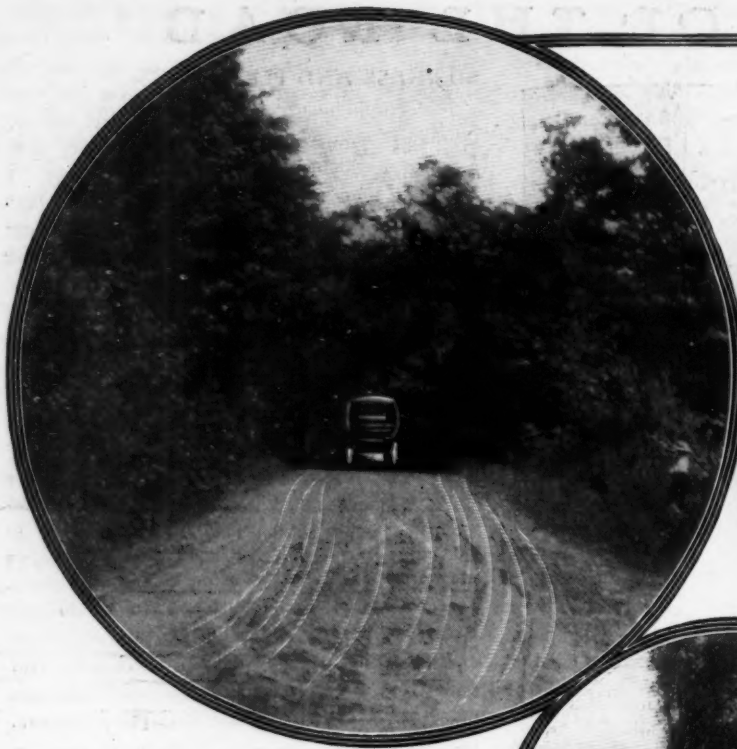
The employment of the automobile as a means of conveyance between residence and place of business has, as a general proposition, ceased to be a novelty; but the extent to which H. C. Baxter, of New England, relies on his 35-horsepower Peerless limousine to carry him regularly from one to the other of his widely scattered business interests is worthy of some comment.

Mr. Baxter owns a chain of canning factories scattered through New Hampshire, Maine and eastern Canada. He spends the summer months at Walpole, N. H., concentrating his attention on three large canneries in that region. Formerly he depended on the slow and uncertain accommodation trains to carry him from one town to another and on his horses for transportation within the towns. But this year he determined to emancipate himself from dependence on train schedules, and accordingly, he drove his Peerless to Walpole from Brunswick, Me., where he had been using it during the winter, and put it in commission among the foot hills of the Green mountains. All this summer he has been making daily trips to his various factories and has found going about from place to place a source of pleasure rather than of annoyance as it formerly was. One cannery is situated at Westminster, just across the Connecticut river from Walpole and Mr. Baxter makes a short stop here each morning. Another of his canneries is at Windsor, 35 miles to the north, and Mr. Baxter makes this trip 3 days a week. On the three alternate days he drives in his car to Brattleboro, 22 miles to the southeast, where the third cannery is located.

"The exhilaration of daily driving gives a man just the 'ginger' he needs to tackle his business duties," said Mr. Baxter. "On Monday, Wednesday and Friday I leave Westminster, just across the river from my home at Walpole, at about 10:30 o'clock in the morning and drive to Claremont, 24 miles to the north, where I take luncheon, arriving there a little before noon. This is a few miles out of the way, but I can get a very good meal here. This point of being free to eat my luncheon at the best inn in the vicinity, I appreciate very much. In former years, when I made these trips by railroad, I had to lunch at the dingy station restaurants. The road to Claremont follows the Connecticut river and carries me through Bellows Falls and Charlestown. Just beyond the latter there is a stretch of 3 miles of road not equaled by the state highways of Massachusetts. It is composed of gravel, packed hard, and is called here a 'natural road.' The remainder of the road on this 24-mile run is characteristic of this section—rough, hilly and sandy in the bottoms. The scenery leaves nothing to be desired.

"After dining at Claremont I make the 11-mile run to the factory at Windsor. The route here leaves the valley and crosses the hills, some of which are very steep, but I have never been stalled yet. On my first trip I asked an old inhabitant if there were any steep hills ahead and he said there were not.





THROUGH PICTURESQUE NEW ENGLAND IN A PEER-
LESS LIMOUSINE

Within 10 minutes I struck one which is at least 2 miles long. I think this incident is characteristic of the information the tourist usually gets from the natives. I return from Windsor by a more direct route, taking about 1 hour 40 minutes from the factory to my house. Sometimes I vary the run to Windsor by going through Springfield, Vt.

"The trip to Brattleboro, which I have taken every Tuesday, Thursday and Saturday during the summer season, is over roads even worse than are encountered on the Windsor trip. There is only one good route and that is by the way of Putney. The hills—all my city friends who have visited me call them mountains—are extremely steep, but my machine climbs the steepest on the second speed. On the shorter ones I never think of traveling on anything but high speed. My speedometer registers about 10 miles an hour while ascending on the second speed, and better than 30 miles on the few level stretches which are encountered. The factory lies a mile beyond Brattleboro and after visiting it I return to the town for dinner and thence home by the same route. I usually allow about 1 hour 20 minutes for the trip to this factory. The fastest train to Brattleboro takes 45 minutes and there is the additional time and trouble of getting a livery rig to take me to the factory.

"My wife and four children generally accompany me on these trips and all of us enjoy them immensely. Rain never interrupts the schedule, as, with a limousine, the elements can be defied. I have made these trips every week day this summer as outlined above except when I took a week's vacation and drove with my family to New York and then to Boston and back again, passing through five states.

SURVEYING A NEW ROAD

S. H. Baker left Boston last week in a Rambler for Portland, where he was joined by Mr. Jordan, a civil engineer, and assistant. At Poland Springs the real work of the trip began, the object of which is to survey a road from the Poland Springs house to the White Mountains suitable for automobiles. It is expected that 10 days will be consumed in mak-

ing this trip, as the engineer will want to stop and look the country over to see where roads might be shortened and the grades made better. Ricker & Son, the promoters of the trip, are expending in the neighborhood of \$1,000 in making maps and looking up localities and they feel that after this start has been made that the state will take up this matter and that a good road will be laid out between these two points.

SHOOK UP THE COW MAN

Of the recently-described trip of a party of motorists into the northwest Missouri river country, George W. Roskie writes as follows: "We made the trip to the Missouri river country in August, as was stated, but we started from Madison, S. D., instead of Madison, Wis. The trip covered 1,200 miles and consumed 10 days. It was a continued business and pleasure trip, was a complete success, and demonstrated the utility of the automobile as a means of rapid, clean and pleasant locomotion. While South Dakota roads are ideal for automobiles where they are traveled, the cross roads and cut-offs are frequently rutty and grass grown, making it difficult going. But with a due exercise of caution in the worst places we made the trip without a minute's delay or a cent's worth of repairs on account of the motor. We crossed the river on a pontoon bridge at Chamberlain, going out, and just there our precaution in taking along extra gasoline saved us going "dry" 75 miles from a drop of this especial liquid. We recrossed the river at Pierre on a ferry and here, as at Chamberlain, the toll

man got his first fee for an automobile. It was while we were west of the river that we found our best roads. We went the old Black Hills trail. This historic route is now nothing more than an immense cattle trail trodden smooth and level as a floor by thousands of cattle. The machine was the source of much delightful curiosity and comment on the part of the cow-men, who evinced a great desire to 'rope the critter' and put their hands on it. To most of the inhabitants the automobile was a new experience and one typical cow-man who intimated that he would like to 'ride the animal' will not soon forget his initial spin. We took him in, hat, spurs and all, and 'hit the trail' at about a 30-mile gait. It was all right for a time and the passenger seemed content with hanging on to his sombrero and looking for a soft spot to land; but when the machine jumped a rut and mowed a swath of prairie grass from the roadside he exhibited an almost uncontrollable desire to get out and walk and we had to lay hands on him in remonstrance. When he got out finally he looked us all over for a minute or two, and then ejaculated: 'Well, stranger, that thing may be all right in your country, but I'll do my riding on a pitching horse, and die like a human.' The broad, genial, hospitality of the west we found everywhere. We traveled over what we Dakotans think the finest country the sun shines upon; our route took us through sixteen counties and fifty-three towns, embracing 1,200 miles of road, which we traveled in 8 actual days, having laid up 2 days at Hitchcock on account of heavy rains. Just as an illustration of the extent to which in time the automobile may supplant the horse: We heard of a prosperous ranchman 60 miles west of the river who had a runabout corralled with his cowponies, though he was not credited with using it in the 'round-up.'

ALL SORTS OF ROADS

Two interesting automobile tourists were in Washington, D. C., last week, having just completed an 800-mile automobile trip from Hartford, Conn. The tourists in question were Messrs. Daly and Langdon and their car was a Pope-Hartford. Like everyone else who comes to the national capital in an automobile, they

encountered some good roads and some mighty bad ones. They are authority for the statement that probably the worst roads in any part of the east are in a portion of Delaware and on the eastern shore of Maryland. In Delaware they got on a road that was so bad that they pulled down a fence and drove a portion of the way through a corn field, finding it better than the road. Reaching Washington they went to the Pope Mfg. Co.'s garage on Fourteenth street, and met Manager Royce Hough, who piloted them on a 60-mile trip around the city and in the immediate vicinity. After spending some time in Washington they shipped the car back to New York, and from there made the trip to Hartford in the machine. Mr. Daly, who conducts a large plumbing establishment in Hartford, has fixed his Pope-Hartford car up in fine style. All the pipes are of brass, while the muffler is of copper with nickel-plated ends.

TESTING A THOMAS FLYER

New Haven, Conn., Sept. 19—Charles S. Henshaw, the New England representative of the E. R. Thomas Co., of Buffalo, N. Y., is in town with a new 40-horsepower Thomas Flyer which has already been driven about 3,000 miles within the last 30 days.

The car has attracted widespread attention owing to its many new features and especially because the Thomas people intend to have the car driven 15,000 miles before it is to be returned to its starting point. It may be said that the Buffalo concern has adopted a new policy, inasmuch as instead of sending out a large number of salesmen and many cars, this one car is to be used almost exclusively for the same purpose and will be sent through all the territory which heretofore was covered at a much greater expense by a large staff.

Thus far the following cities have been visited by Mr. and Mrs. E. R. Thomas, who started in the car from Buffalo: Syracuse, Albany, New York, Philadelphia, Atlantic City, Baltimore and Washington. It was in New York that Henshaw took charge of the car, his companion on the New England trip being Norman Meyneke.

Many prominent people in all these cities came to look at the new car and were given rides. One of the most interested automobilists in the new Flyer was Governor Chamberlain of Connecticut, who was given a long ride through Hubbard park in Meriden. The journey thus far has been void of any kind of trouble.

CONNECTICUT TO THE FAIR

A party consisting of A. L. Potter, chairman of the board of police commissioners of Norwich, Conn., and the Misses Eva, Ruth and Ella Potter and Miss E. Pouch, recently arrived in St. Louis, Mo., having covered 1,563 miles in 11 days in a 24-horsepower Thomas. Of the long journey Mr. Potter said: "We went through seven states and had no mishap. In an Illinois locality we came pretty near having trouble. A farmer's horse became frightened at our approach. We stopped and the horse continued, seemingly having recovered from its fright, when suddenly while in front of the machine it shied and kicked the dashboard. It was several minutes before the animal was calmed. About 12 gallons of gasoline were consumed daily on the run and we never encountered hostility on the part of the country people. If a national highway across the continent were established, trans-continental automobile tours would be as common as railroad train trips."

HOME FROM EUROPEAN TOUR

Dr. I. E. Emerson and his daughter, of Baltimore, Md., returned home a few weeks ago after having traveled several months through Germany, France and England in a new Leon Bollee car, which was purchased in Paris. The doctor took a car abroad, but preferred to get one of the latest style cars on the European market. Speaking about the trip Dr. Emerson said: "Our automobile was so noiseless we crossed the frontier between France and Germany without being held up by the guards. We were not trying to evade them, but they were not at their posts and our noiseless car attracted no attention. The scenery of the Moselle and Rhine valleys from the splendid roads we traveled were surpassingly beautiful and Homburg, with its pic-

turesque castle and mineral springs, was a beautiful ending to our journeying along the castled and legend-haunted Rhine. Only once did our automobile threaten to fail us. It was in the valley of the Moselle, and we were going up an incline so precipitous that the engine was higher than the gasoline supply tank and there was nothing to generate power. I was negotiating with a peasant for the loan of two cows he was driving harnessed to a cart when the chauffeur had a brilliant idea. This was to turn the automobile around, which put the gasoline supply higher than the engine; the wheels revolved and we backed to the summit in triumph. The incline going down on the other side was so nearly perpendicular that we walked. We traveled from Plymouth to London, a distance of 242 miles, in 9 hours. This was going very fast, especially as the speed limit in England specifies 20 miles an hour as the maximum. We had to slow down in at least twenty-five villages and could thus have made better time."

INTERESTING BUT HARD

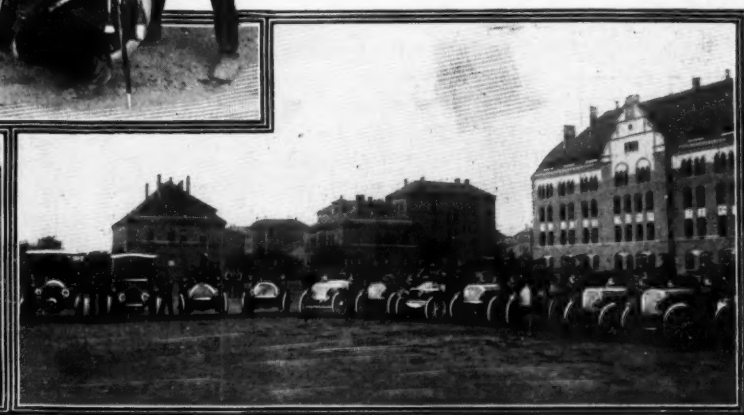
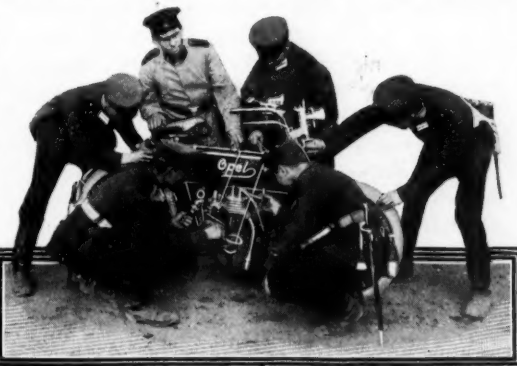
Samuel G. Buckbee, of the executive committee of the Automobile Club of California and one of the most enthusiastic automobile tourists in San Francisco, made a very interesting run recently in his White steamer. Starting from San Rafael he drove to Petaluma, Santa Rosa, Napa, Napa Soda Springs, Aetna Springs, through the Chiles valley. From Aetna the tour led over the Howell mountain to St. Helena and Calistoga and then over Spring hill to Santa Rosa and home. The hardest part of the trip was over Spring hill to Santa Rosa, a distance of 18 miles. The incline is 4 miles of continuous grade from 8 to 10 per cent. "It is the hardest climb to which I ever wish to put an automobile," said the automobilist, "and besides the steepness, the road is not in very good shape. The run from Napa to Napa Soda Springs is 8 miles and the 2 miles at the finish is something frightful, almost impassable in spots, but the automobile pulled the party comfortably through. The roads as far as Sonoma are in excellent condition."

AUTOMOBILES IN THE GERMAN ARMY

According to the arrangements made by the general staff of the German army there will be more automobiles and motor cycles used in connection with this year's military maneuvers than in any other army affair. The German emperor has given special instructions that the most extensive tests be made with big cars and with the two wheelers. It is also likely

that if the results are as satisfactory as expected it will lead to the formation of an imperial automobile and motor cycle corps.

As in France, cars and motor cycles from home manufacturers are used; Mercedes, Benz, Adler, Durrkopff, Opel, Darracq, Argus and Cudell cars; Brennabor, Progress, Adler, and Neckarsulm motor cycles being leaders.



GERMAN MILITARY CARS ON WAY TO MANEUVERS

HURRIED "TUNING-UP" OF A GERMAN MILITARY MOTOR CYCLE

THE CARS OF GERMAN MOTOR CORPS ON PARADE

PACKARD RECORD GOOD

Run from Los Angeles to San Francisco Made Under Great Difficulties in Quick Time

San Francisco, Cal., Sept. 19.—The record made last Tuesday, Wednesday and Thursday by W. R. Densmore and three companions in a Packard model "L" stock car from Los Angeles to San Francisco and which was briefly reported in last week's MOTOR AGE, continues to be the topic among local motorists. It is only now that one begins to realize that the performance was one entirely out of the ordinary and that no such severe test for a motor car has been made in this country this season.

It should not be forgotten that this was a continuous journey of nearly 600 miles, including many miles which were run by getting on the wrong roads; that none of the four persons in the car had more than a few minutes sleep during the run; that none knew the roads or had gone over them previously in order to get well acquainted with them; that the car was not prepared a week ahead, nor specially sent from the factory; that all that was done before the start was a thorough inspection of all the parts, the grinding of the valves, the cleaning and adjusting of the coil, the changing of the batteries and the fitting of a pair of new tires. Furthermore, gasoline of from 66 to 68 degrees was used almost exclusively, which was a drawback and that the car carried more than 125 pounds of luggage besides the four persons.

At 5:25 the morning of September 13 the start from Los Angeles was made. Besides Mr. Densmore, who is one of the Packard Motor Car Co.'s salesmen, there were in the car Wallace W. Everett and H. A. French, newspaper men and observers, and H. B. Larzelere, a Frisco motorist, who alternated with Densmore in driving the car. Canejo Pass was passed at 9:05 a. m., and Ventura 1 hour 20 minutes later. A local motorist, driving a Thomas car, showed the party the way. He went as far as Santa Barbara, which place was reached at 1:25 p. m., where dinner was taken. This took 1 hour 10 minutes and then the trip was resumed, Everett acting as guide. During the first part of the trip the roads were fine, but rough places were frequent, and required clever driving. After 2 hours 40 minutes steady going Caviota was reached, and at 6:55 p. m. the tourists arrived in Los Olivas, where they had supper and rested until 9:35.

A few miles from Los Olivas the brakes refused to work, consequently more than half of the run was made without the aid of brakes and the motor had to be used for the purpose. It was a strain on the motor and the transmission, but everything went on smoothly, even over the roughest and steepest mountain roads.

The night run was then begun and although strong lights were on the car it was sometimes difficult to run as fast as wished, owing to the fact that the motorists did not know the road and thus did not dare take chances. Yet good time was maintained. At 1 o'clock in the morning Santa Maria was reached and after spending 35 minutes in the village the record breakers continued to San Luis Obispo, where they arrived at 5:10 a. m. Between the previous locality and this place they lost their way several times and had a good deal of

trouble in finally getting on the right highway.

The most trouble during the entire journey was experienced after leaving Paso Robles, which locality was reached at 8:09 a. m. Wrong roads were taken during about 6 hours and it seemed as if nobody knew just how to get on the right road. Bradley was in sight at about 2:20 p. m. and after spending 30 minutes resting and putting in a new inner tube the journey was continued. After 3 hours 10 minutes of fast riding the party arrived in Jolon and started without stopping more than a few minutes. After dark the guide again took them on the wrong roads and it was 10:25 p. m. when Soledad was reached. An hour was spent in fixing another puncture and finally a new inner tube was put in place of the defective one.

The tired-looking but plucky motorists continued and another right run was started. All were confident they would finish the trip without serious accidents and make a record which would be envied by others. In all the localities where they stopped they met with courteous reception and everybody seemed willing to aid them in whatever capacity they might be useful.

At 12:58 a. m. the Packard car and its passengers arrived at Salinas, where it remained until 2:15 a. m. Then it started for San Jose and made a fine run, having little trouble in getting all the speed desired. It was 7:48 in the morning when the men entered San Jose, where quite a crowd greeted them. By this time tiredness had given way for new energy and the thought that the goal was not very far distant made all more cheerful than they were at any time since they started.

Densmore took the wheel and at 8:45 the last run was started. A fast clip was maintained, yet it was careful driving all the way to Frisco. Five minutes after 11 o'clock Thursday morning the Packard arrived in San Francisco, having completed the journey from Los Angeles or approximately 600 miles, in 53 hours 40 minutes elapsed time.

In speaking of the trip Mr. Densmore said: "It was a great run; in fact, an extraordinary automobile performance, considering the lack of knowledge of the roads and the fact that the car was not fixed up any different than any other stock car. Some people may think that the New York-Pittsburg and the New York-St. Louis runs were much more difficult, but they were not, inasmuch as the road was pretty well known to all the contestants and there was no night riding. Again on five different occasions we crossed the coast range mountains and also forded a great many rivers. The latter are in reality rivers of sand, usually from 300 to 500 yards wide and the sand is deep and soft.

"The lack of sleep did not interfere much with our going, as we were too enthusiastic and confident of our undertaking. We lived mostly on coffee and ham sandwiches and feel somewhat weak now. We had only two punctures, but one narrow escape from a serious accident on the San Juan grade. In changing gear the clutch slipped and the car went backward. We were then near the steepest part of the grade. The brakes were then all out of order and Larzelere, French and Everett jumped out of the car and tried to check its going down the grade. I was successful in steering the car into the bank, and thus saved a bad accident."

VINGT-ET-UN A WINNER

On Time Allowance American Boat Scores 25 Points in A. P. B. A. Annual Cup Race

New York, Sept. 24.—The 3-days' racing for the gold challenge cup of the American Power Boat Association over the Columbia Yacht Club's course on the Hudson ended today with the Vingt-et-Un, owned by W. C. Kelmer and fitted with a Smith & Mabley Simplex engine, the winner with 25 points, having won on the second and third days and been fifth the first day. The score of the others was C. L. Seabury's Speedway, 21; H. L. Bowdin's Mercedes, U. S. A., 19; C. D. Holmes's Flip, 18; J. W. Allison's Marcirene II, 14; W. K. Vanderbilt, Jr.'s, Mercedes VI, 10; Hollander & Tangeman's Macaroni Fiat, 9; H. A. Lozier, Jr.'s, Shooting Star, 5, and A. J. Buschman's Josephine, 3.

Each day the first boat scored points equal to the number of starters, the second one less and so on to the next to last, which got 1 point.

The ratings of the competitors were:

BOAT AND OWNER.	Horse power.	Length on		
		ft.	in.	ft. in.
Speedway, C. L. Seabury....	64.45	39	03	72.84
Mercedes, H. L. Bowden....	42.20	31	11	72.50
Challenger, Smith & Mabley.	19.44	39	07	88.35
Vingt-et-Un H. W. S. Kelmer	59.72	38	10	79.35
Macaroni, C. H. Tangeman.	40.38	31	11	68.10
Josephine, A. J. Buschmann.	19.08	29	11	53.40
Mercedes VI., W. K. Vanderbilt, Jr.	39.52	39	90	65.70
Shooting Star, H. A. Lozier, Jr.	24.07	37	80	65.55
Flip, C. D. Holmes.....	38.09	34	20	65.01
Marcirene II., J. W. Allison.	34.40	34	50	54.25

On the basis of the above the allotments were:

BOAT.	Allowances.		BOAT.	Allowances.	
	M.	S.		M.	S.
Challenger.....	10	17	Mercedes VI.....	31	12
Vingt-et-Un.....	10	17	Shooting Star.....	31	29
Speedway.....	19	20	Flip.....	32	17
Mercedes, U. S. A.....	20	05	Marcirene II.....	56	55
Macaroni.....	26	06	Josephine.....	59	17

Each day the boats were sent away in the order of the handicaps, so that the order of finish represented the results of the races.

The first day the stake boat was misplaced, so that the distance covered was only 27.25 knots. The result follows:

BOAT.	Handicap.		Elapsed time.
	start.	Finish.	
Mercedes VI.....	3 33 05	4 54 35	1 21 30
Macaroni.....	3 37 22	5 05 43	1 27 21
Speedway.....	3 44 57	5 07 10	1 22 13
Mercedes, U. S. A.....	2 44 12	4 59 29	2 15 17
Vingt-et-Un H.....	3 54 00	5 09 57	1 15 57
Shooting Star.....	3 32 48	5 13 07	1 40 19
Flip.....	3 32 00	5 19 26	1 47 26
Josephine.....	3 05 00	5 25 25	2 20 25
Marcirene II.....	3 07 22	5 31 27	2 24 05
Challenger.....	4 04 17	Did not go course.	

This gives the Mercedes VI an average of 23.07 and the Vingt-et-Un 24.76 statute miles.

The second and third days the course was full 32 miles. The second day's conditions and results were:

BOAT.	Handicap.		Elapsed time.
	start.	Finish.	
Vingt-et-Un H.....	2 54 00	4 21 03	1 27 03
Flip.....	2 32 00	4 47 59	2 15 59
Marcirene II.....	2 07 22	4 59 20	2 51 58
Mercedes, U. S. A.....	2 44 12	4 59 20	2 15 17
Speedway.....	2 44 57	5 14 38	2 29 11
Shooting Star.....	2 32 48	Did not finish	
Macaroni.....	2 37 22	Did not finish	
Mercedes VI.....	2 33 05	Did not finish	
Josephine.....	Did not start		
Challenger.....	Did not start		

Many disasters, including the catching on fire of the Macaroni, which William Wallace

of Boston was driving, marked the third day's races, whose results follow:

BOAT.	Handicap,			Elapsed time.		
	start.	Finish.		H. M. S.	H. M. S.	H. M. S.
Ving-et-Un II.....	3 24 00	4 54 24		1 30 24		
Speedway	3 14 57	5 00 34		1 45 37		
Mercedes, U. S. A....	3 14 12	5 09 15		1 55 03		
Flip	3 02 00	5 14 26		2 12 26		
Marceline II.....	2 37 22	5 34 17		2 56 55		
Josephine	2 35 00	Did not finish				
Mercedes VI.....	3 03 05	Did not finish				
Shooting Star	3 02 48	Did not finish				
Macaroni	3 07 22	Did not finish				
Challenger	3 34 17	Did not finish				

PLAN BIG GERMAN SHOW

Berlin, Germany, Sept. 16—The annual automobile and motor cycle show of Berlin, will be held much earlier next year. February 4 to 19 is the period which has been chosen by the German Automobile Club, and the reason is rather interesting. The Flora hall, in which the exposition was held last year, is entirely inadequate for a large display. Other private halls or buildings are neither well located nor have a large floor space. The officials of the German Automobile Club then decided to ask the government for one of the many large buildings belonging to the state and now the splendid agricultural park building has been placed at the disposal of the club and the industry. The question then arose as to when the show should be held. Heretofore it took place during the latter part of March or in April, but inasmuch as the hall is to be used for another exhibition at the end of February the club decided upon the dates given above.

From the opinion expressed by a few local dealers the earlier dates are welcomed by the trade, and they hold that still earlier shows would be of greater benefit. It is claimed many wealthy Germans go to the Paris salon, which is held in December, and purchase there, while if the Berlin show were held either before the French show or shortly after, it is likely many German orders would be placed at home.

No efforts to insure the success of an automobile show in Germany have ever equalled those now being made for the Berlin affair. The German, as is generally recognized all over the world, does things carefully and generally succeeds. He is not as enthusiastic outwardly as the men from beyond the Rhine, nor as quick as the Yankee, but he is exceedingly systematic and cares a great deal about the details of an enterprise. Therefore it may be safely said that the next automobile and motor cycle show in Berlin will be a great affair.

There is another reason why everybody interested in the industry intends to work harder than ever in connection with the capital's international exhibition. Berlin would like to become as well known in the industry as is Paris and London.

As usual it is expected all the important automobile manufacturers will exhibit. Especial interest will be attached to the motor cycle display on account of the enormous development this part of the industry has taken within the last year. Probably nowhere outside of London will there be such a large and varied display of these little machines. All the well known French manufacturers of motor cars and motor cycles will be well represented, as well as a few exhibits of Belgian, Austrian, Italian, and English wares.

NO RECORD THIS WEEK

Rain Prevents Scheduled Chicago-New York Trips of Columbia and Franklin Teams

Chicago, Ill., Sept. 28—The weather man wants no more Chicago-New York record breaking. He is apparently opposed to all such automobiling ventures, for the whole of the past week he has flooded the country with mud and tantalized two record breaking teams with just enough sunshine to tempt them to stand like minute-men of old ready to rush into the fray at the slightest rumor of navigable highways.

The Electric Vehicle Co.'s team, headed by Bert Holcomb, has been in Chicago over a week. It was expected to start the big Columbia eastward at 2 a. m. Monday from the Chicago Automobile Club. Rain interfered and the team has postponed the start each day. Yesterday it was decided to venture on the trip Thursday of this week, but last night's deluge has caused another postponement and the attempt to shatter the Ellis-Schmitt record of 72 hours 43 minutes will not be made until next week.

While the Columbia team has been loitering in Chicago another outfit—the Franklin—arrived on the scene and quietly erected its camp with W. F. Winchester as chief. Preparations were made to start the air-cooled Franklin on its tough journey at 2 o'clock this morning and promptly at 2 Winchester pulled his leather cap further over his left ear and threw in the clutch, Assistant Secretary Spangler, of the Chicago club, dutifully giving his famous and unequalled "official" start. Incidentally Spangler is gaining considerable notoriety and losing considerable sleep because of his great skill at 2 a. m. "officializing."

Rain threatened at the time and as soon as the Franklin disappeared into the murky distance the half-dozen newspaper men, the starter and several spectators lost no time in calling the job completed.

Winchester ran into rain and mud and did not reach South Bend until 9:40, hours behind schedule. The attempt was clearly hopeless, and called off, Winchester coming back to Chicago.

It is possible another attempt will be made as soon as weather permits. Chicago enthusiasts hope so, for there is much speculation here over the probable performances of a light and a heavy car on this trip and the Chicagoans hope to see the matter raced out.

PLENTY OF ENTRIES

Chicago, Ill., Sept. 28—Entries for the race meet of the Chicago Automobile Club at the Harlem track Friday and Saturday of this week have been received rapidly during the last few days and thirty local drivers are scheduled to appear. This list of amateurs is supplemented by Barney Oldfield and Carl Fischer as star performers, driving respectively the Peerless Green Dragon and the Premier Comet. The officials had hoped they might be able to secure the presence of Earl Kiser and one or two other speed merchants, but failed.

There is every indication that the racing will be good, as the track is being put in excellent shape and the list of entrants of the heavy class races include several high powered cars

that ought to furnish close contests. Several match races have been arranged, not only for the professional racing talent but for local drivers as well. The latter include a race between two Chicago women, Miss Neva Scott and Mrs. L. J. Roenitz.

The track will be watered each morning and cars kept off it until the racing begins in the afternoon, it being expected in this way to prevent the raising of greatly dangerous dust.

Word has been received by the club that the members of the Rockford Automobile Club, of Rockford, Ill., are planning to attend the meet in a body. There will also be a big delegation of club men from Grand Rapids, Mich.

FRANKLIN PLANT GROWS

The H. H. Franklin Co., of Syracuse, is building a magnificent new plant near the present building and will have it ready this fall. The new building will cost in the neighborhood of \$75,000 and will be of modern construction in every respect. The addition was made necessary by the rapidly increasing business. It is expected that the output next season will be much larger than this. Sales Manager C. A. Benjamin said the output of this year was practically disposed of and from what the agents say he expects a big year next season. The new building will put the company in a position to greatly increase its output and to make prompt deliveries. In it will be the woodworking and body making plant, receiving rooms, and considerable of the special machinery. The building is five stories high and 163 by 62 feet in dimensions. Brick is the material used.

The Franklin company expects to put out two new models next year in addition to the three on the market this year. This season the company sold a runabout, runabout with tonneau and a heavy touring car. In addition to these next season there will be a high powered runabout, which will be one of the speediest cars on the market, and a light touring car. The present models will be of the same general appearance, but much improved in detail.

Mr. Benjamin said: "All the agents who have been here have offered to contract for many more machines than they sold this year. We have also received a large number of applications in new territory. I believe that the air-cooling idea is growing and next year will see many more of them in use than this year."

Among the visiting agents of the past week were A. R. Bangs, of Boston; R. M. Owen, manager of the American Automobile Storage Co., of New York; A. C. Halsey, of the Halsey Automobile Co., of St. Louis, and Arthur McNall, of Rochester.

Mr. Benjamin has returned from a trip through New England in his automobile. Accompanied by Mrs. Benjamin he spent a pleasant vacation. They ran through the Berkshire hills to Boston, thence to Newport, Providence, Narragansett Pier, New London, New Haven, Bridgeport, New York and from the metropolis up the Hudson river to Albany and home. They had the best weather they ever had on a trip and never encountered a shower. They had a Franklin car, in the tonneau of which they carried the baggage, of which there was 275 pounds. The trip took about 3 weeks. The roads were excellent except in New York state.

NEW CLEVELAND PLANTS

Peerless and Baker Concerns To Build Big Factories—Winton Has New Selling Plans

Cleveland, O., Sept. 27—It is very probable that next spring will see two fine new automobile factories in Cleveland. Not for new concerns, but larger quarters for two substantial concerns which have outgrown their present facilities. A year ago the Peerless Motor Car Co. bought property at the corner of the Pennsylvania road and Quincy street, a short distance from the present factory, and had plans prepared for a new plant, but the death of L. C. McClymonds, chief stockholder of the company, together with the doubtful financial outlook, put an end to the building plans for the time being. For next season it is imperative that the company secure larger manufacturing facilities. This year the company could have taken care of considerably more business had it been able to produce the goods, and as a matter of fact it has been remarkable how the company has been able to turn out so many machines as it did in the antiquated frame building which the company has occupied since its specialty was wringers, with bicycles as a side line.

Knox & Elliott, leading architects, have completed plans for the plant and contracts are being let and it is expected that the building will be ready for occupancy before next spring.

The Peerless company has about completed a new racer, the machine built to replace the Green Dragon, which was destroyed at St. Louis. It is a lighter and smaller car than the big eight-cylinder machine which Barney Oldfield tried out at the Cleveland races last month and which for some reason or other has not yet come up to the expectations of its designer. The new car will be tried out at Glennville the last of the week.

It is also understood that the Baker Motor Vehicle Co. has similar building plans. At the time the American Ball Bearing Co. built its new factory on the west side, the Baker company, which is controlled by the same interests as the American company, bought a piece of property adjoining the American plant and had plans prepared for a fine large plant. But, like the Peerless company, the Baker people were conservative and decided to wait for a better financial outlook. The business of the company has developed in a most pleasing manner this year and a larger factory is necessary. The Baker site is not very far from that of the Winton plant, which, with the American Ball Bearing Co.'s plant adjoining, will make that section of the city a great automobile center.

The Winton Motor Carriage Co. has announced a new plan of distributing its product for another season, indicating that the big company is going after the business harder than ever. Instead of handling all sales through the Cleveland headquarters, the country will be divided into districts and the various branch houses will cover the districts contiguous to them. At present the company has branch stores in New York, Boston, Chicago, Philadelphia, Cleveland and London. It is the intention to establish several other branches in centers not yet determined upon. All sales will come under the charge of the general sales department, of which Charles B. Shanks is manager, but the agents in the va-

rious districts will do business through the district managers. The Winton company has never had any traveling men on the road and has had little need to solicit agents. It is understood that for next season the line will be a varied one, so that a Winton agent will be able to supply three different types of cars. The Winton people decline to state anything about prices or mechanical features, but Alexander Winton has been seen driving a small machine of the light touring car type and it is safe to predict that the Winton line will embody a medium priced car of a pattern smaller than has heretofore been brought out by that company.

FIELD IN NEW ZEALAND

Christchurch, New Zealand, Aug. 25—A recent article in a New Zealand trade paper has created widespread comment in the Australasian islands, and it is generally believed that the result will be to give automobile matters a great boom here during the next season.

During the present season there has been no boom in the trade, which, however, was far from being unsatisfactory. Most all the cars sold were paid in full when the orders were placed, a method of business which is seldom practiced in other countries. The reason of the prompt settlement instead of the time payment is the scarcity of cars on the New Zealand market, and the anxiety of the purchasers to be sure that the cars will be theirs.

The business of the automobile trade has been retained by legitimate traders instead of coach builders, wagon manufacturers and others who are not directly concerned in the industry. In Christchurch there are two garages and show rooms which are among the largest in Australasia. They cost a great deal of money and the fact that many thousands of dollars were invested in such undertakings shows that its proprietors are confident that the investment will become profitable.

The electric tram is doomed inevitably to disappear before the motor bus, just as the dug-out disappeared before the steamboat, says the paper. In the course of a very few years those cities which are now jubilating over their electric tram installations will receive a very rude awakening when they are forced to pull up their rails and sleepers and dismantle the streets of their unsightly poles and wires. We have had during the past few weeks ocular demonstration of the capabilities of the motor bus in Christchurch, and the accompanying wailing and gnashing of teeth on the part of the cab-driving fraternity. As the pioneer motor bus, passenger laden, speeds its way among the traffic of our busy thoroughfares, side by side with the preparations being made for the coming electric trams, one is forcibly reminded of something similar when Stephenson's steam engine first commenced to wipe out the old-fashioned stage coach. But electric trams will have to succumb to the march of progress, and go the way of the stage coach, the sailing ship, the spinning jenny and the dug-out.

NOW THE REO CAR CO.

The R. E. Olds Co., of Lansing, Mich., which was recently organized, has changed its name to the Reo Car Co., in order to avoid any possible confusion with the name Oldsmobile or Olds Motor Works, Ransom E. Olds having been the founder, vice-president and general manager of the last named company, and being president and general manager of the Reo Car Co.

WANT STANDARDIZATION

A. M. A. L. Superintendents and Engineers To Meet in New York October 7 to Organize

New York, Sept. 26—Arrangements are being made for the meeting of the superintendents and engineers of the concerns in the A. L. A. M., which is to take place next week.

The representatives of the various concerns will meet at 9 o'clock in the morning of October 7 at some convenient place near Seventy-second street, and each member is expected to furnish either one or two gasoline cars with experienced operators familiar with the roads in and around New York if possible.

A run, if the weather permits, will probably be up Riverside drive to Yonkers, Irvington and to the Ardsley club house at Ardsley-on-the-Hudson, where lunch will be served. After lunch the run will continue across country through White Plains to Travers island on Long Island sound, where, through the courtesy of the New York Athletic Club, there will be light refreshments. The run will end in New York city at about 6 in the evening, and dinner will be served at some convenient place.

Representatives will have an opportunity of seeing the other cars under actual service conditions on this run, and will be given an opportunity to ride in as many different cars as time will permit.

The circular issued by Manager Day on the topic continues as follows: "The association, through the 18 months of its existence, has proven of immense commercial value to its members. It is believed as a result of this coming together of the superintendents and engineers such acquaintance will prove equally beneficial. The principal purpose of this meeting should be with a view of organizing a mechanical branch of this association—not an engineering society—consisting of the superintendents and engineers.

"There seems to be an immediate necessity for such a body of men taking prompt action, with a view of reducing the cost of maintenance of an automobile, and this can be brought about through the standardizing and making interchangeable certain parts of the cars, simplifying their construction, and finding a better solution of the rubber tire situation, all of which would result in sustaining the interest with the present users of automobiles and further extend the field of the sale of automobiles.

"Superintendents and engineers are largely the proper individuals to direct these improvements, and to bring about this much-desired condition.

"If the mechanical branch is organized at the dinner on the evening of October 7 it should immediately concentrate its efforts on: 1—Reducing the cost, per vehicle mile, to a lower point than is possible with any other present means of transportation; 2—Thorough study of the tire question; 3—The standardizing of parts within the range of possibilities and making as many parts and fittings interchangeable as possible.

"A free interchange of ideas between these men will encourage individual efforts and eliminate much of the expense of experimenting, all of which will prove of infinite value to members, to the dealers in and users of auto-

mobiles. If these results are accomplished then the association will have fulfilled one of its most important missions."

There will be about seventy-five superintendents and engineers and some twenty-five or thirty cars represented. The meeting will probably end with an informal dinner at the Casino in the park opposite Seventy-second street. All those attending the meeting will take in the Vanderbilt cup race, where some of the new foreign cars may be looked over.

ARMY TESTING MOTOR CYCLES

In the United States army are a number of officers who are firm believers in the value of automobiles and motor cycles for military purposes, but none more so than General Baldwin, commanding the department of the Colorado. With a view to making a practical test of motor cycles to determine their practicability for use in time of war, he has suggested to the war department the arrangement of a race between such machines from Denver to Washington, D. C. He says if the department will authorize the expense he will arrange to have two enlisted men make the trip from Fort Logan, Colo., to Fort Myer, Va., just across the river from Washington, one of the men to use a motor cycle at Fort Logan belonging to the government, and the other man to ride a motor cycle to be furnished by a manufacturer, and claimed to be superior to the one owned by the government. It is expected that the war department will authorize General Baldwin to go ahead with the proposed trial and thus will be demonstrated to the fullest extent the practicability of motor cycles for army use.

JEALOUS OF OUTSIDERS

Florence, Italy, Sept. 14.—The Sonsuma cup race for a trophy offered by the Automobile Club of Florence, was run September 11, near Florence, and ended with a scandal. Lancia, in a 75-horsepower Fiat, made the fastest time, covering the course of 15 kilometers—9.3 miles—in 13 minutes 20 seconds. Upon the request of the other competitors the Fiat racer was re-weighed and found to weigh more than the rules permitted.

The car was then weighed in all manner of styles, the judges seeming either to try to do all they could to favor Lancia or to be entirely non-conversant with the rules and procedure of such an affair. Finally as nothing could be done than to disqualify Lancia the judges did so, but at the same time decided that as an Italian driver had made the fastest run with an Italian car, the cup would remain his.

This decision has given rise to general indignation, especially on the part of the French contestants, who, it is reported, said they would never run again in Italy, unless the cup be given to Teste, who was classed first by the judges. The French driver drove a 100-horsepower Panhard car and covered the 5 kilometers in 14 minutes 17 seconds. Duray, in a 100-horsepower Darracq, was second and Nazaro, in a 60-horsepower Mercedes, third.

In the race for light racing cars, Hemery, in a 60-horsepower Darracq, was first in 16 minutes 8 seconds. In the race for touring cars weighing more than 1,760 pounds, three Fiats finished first, second and third, while Florentia cars won the races respectively for light cars and voiturettes.

SHOW CAUSES RIVALRY

Friction Liable to Generate Between the Buffalo Club and the Local Dealers' Association

Buffalo, N. Y., Sept. 27.—The discussion regarding the 1905 Buffalo automobile show is developing some dangerous features. There is intense rivalry between the Automobile Club of Buffalo and the local dealers' association, each organization believing that it should have a part in the management of the show. The difference between the two is that some members of the dealers' association maintain that their association should have entire management of the enterprise to the exclusion of the club, while the clubmen are willing to go snicks with the tradesmen.

Last winter's show was managed jointly, Fred J. Wagner representing the club in the active management with D. H. Lewis, acting for the trade association. The two organizations divided the profits, which amounted to about \$2,500 for each.

Of course the dealers had paid out a good deal for space and for advertising in connection with the exhibition and their drawback did not in many cases even approximate their expenditures. The money received by the club was velvet. These points are now the basis of the argument of those dealers who desire to have the next show conducted solely by the trade. They go so far, some of them, as to assert that they will have nothing to do with a show which is managed jointly. The club members are perfectly willing to have the trade as a side partner, but they think their efforts in booming the show last year did much to make the event the success which every visitor admitted it to be and they consider that their assistance merits a continuance of the dual arrangement.

The show is dated for March 6 to 11 at the City Convention hall, where the last show was held. Some details of the discussion were gone over today at the meeting of the governors of the Automobile Club of Buffalo by E. R. Thomas, president of the trade association, and H. A. Meldrum and A. H. Knoll, governors of the club, acting as a special committee to confer with the tradesmen regarding the show. No decision was reached as regards the main point at issue.

DUMONT CONCERN IN TROUBLE

According to a local report a petition was filed in the United States court of Columbus, O., asking that the Columbus Motor Vehicle Co. be declared bankrupt. The petitioning creditors and the amount of money which is claimed to be due them are: Brown-Lipe Gear Co., of Syracuse, N. Y., \$744.86; Interstate Foundry Co., Cleveland, O., \$722.17; Hartford Rubber Works Co., Hartford, Conn., \$330.88. It is claimed that the company transferred property to some of the creditors with the view of making them preferred.

PIERCE TEST SATISFACTORY

Buffalo, N. Y., Sept. 27.—The new Pierce Great Arrow, which has been tried out on a hard trip through New England, probably will be little changed before it is put on the market for the 1905 trade. "The car gave excellent satisfaction on the trial jaunt," said Charles Clifton, vice-president of the G. N. Pierce Co., today. Charles Sheppy, one of

the expert drivers in the Pierce employ; Henry May, D. Ferguson, designer of the car, and George Cook of the mechanical department, made up the party which drove from Buffalo to New York, thence to Boston and other points. Pierce agents on the road were given a chance to inspect the 1905 model and very generally they approved highly the details of the car. The new car has a side entrance, is 104 inches long and is of 30 horsepower. In other points it is much like the 1904 Great Arrow. A slightly smaller car with 24 horsepower motor and a length of 98 inches, with side entrance, will be turned out next season also.

RECENT INCORPORATIONS

Danville, Ill.—Kelly-Bridgett Co., capital \$50,000; to manufacture automobiles. Incorporators Edward J. Kelly, William M. Bridgett and George T. Buckingham.

Toledo, O.—Indiana Scale and Truck Co., capital stock \$100,000; to manufacture trucks, scales, automobiles, bicycles and other vehicles. Incorporators Samuel Snell, R. B. Dakin, G. F. Miller, Sr., John Renner and R. Fuller.

Watertown, Mass.—Stanley Motor Carriage Co., capital \$95,000. President, Freelan O. Stanley; vice-president, secretary and treasurer, Francis E. Stanley.

Syracuse, N. Y.—Amos-Pierce Automobile Co., capital \$1,000; to sell, buy and exchange motor cars. Directors and stockholders Charles L. Amos, Harry C. Pierce and George H. Denison.

Chicago, Ill.—Chicago Automobile Co., capital \$50,000; to manufacture automobiles and motor boats. Incorporators M. F. Mogg, M. E. Mogg and W. A. Whirlwall.

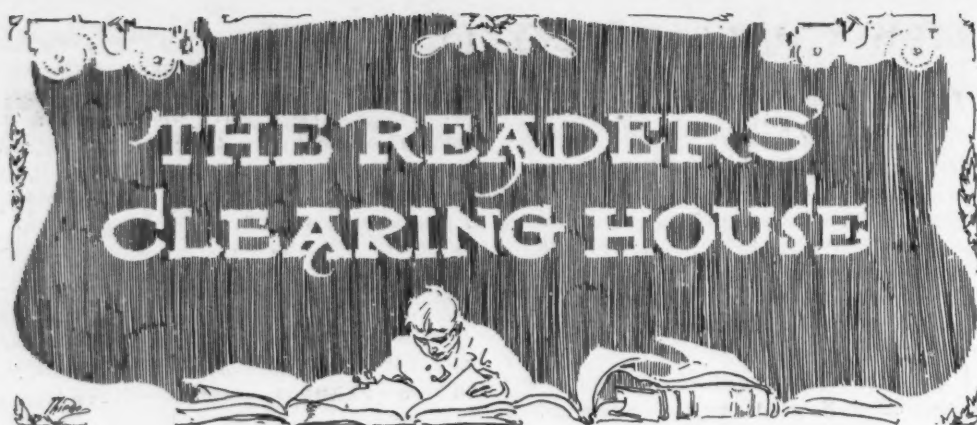
ABOUT NEW MAKERS

The Indiana Scale and Truck Co., which will manufacture automobiles, bicycles, scales and trucks, has been incorporated with \$100,000 capital stock by Samuel Snell, R. B. Dakin, G. F. Miller, Sr., John Renner and R. Fuller, all of Toledo, O. The company has purchased a plant at Bluffton, Ind., but will have the offices at Toledo.

The Automatic Machine & Tool Co., Toledo, O., has leased the Neptune building at the corner of Water street and Jefferson avenue and will have machinery installed within a short time. The new concern will build and repair machinery of all kinds, but will make a specialty of automatic machinery. T. J. Sullivan is president; John Keck, secretary, and C. P. Vail, treasurer.

A. L. Dyke, well known in the trade, is again in the automobile supply business and Monday filed papers of incorporation for A. L. Dyke Motor Car Supply Co., with a capital of \$10,000. A new building 50 by 100 feet is being erected on Olive street, which will be used exclusively by the new concern. Besides handling supplies, the company will take the St. Louis agency for a motor car, do repairing and storing.

D. L. McClintock has applied for a United States charter for the McClintock Automobile and Engine Co., of Kansas City. The capital stock named in the charter is \$375,000. The directors are all Kansas City men with the exception of Mr. McClintock—Hiram Landrus, president of the Landrus Stove and Foundry Co.; Edwin Bond and Fred J. Close. Work on the plant is to begin within 30 days. Mr. McClintock is from Fort Wayne, Ind.



PRINCIPLE OF COILS

Albany, N. Y.—Editor MOTOR AGE—Will you kindly publish an explanation of the construction of the spark coils for make-and-break and jump spark ignition, respectively?—F. B. B.

In Fig. 1 is illustrated diagrammatically the ordinary coil for make-and-break ignition. The connection from the battery B is made to one of the ends of a coil of insulated No. 16 copper wire which is wound around a bundle of soft iron wire, A, called the core. When the remaining coil terminal is snapped on the other battery terminal a spark is produced. This is what is termed a self induction effect. When the current enters the coil while the magnetic flux envelops a conductor, an opposite electro motive force is induced. When the circuit is broken and the magnetic flux decreases in the core, an electro motive force is established in the same direction as that of the battery current. This produces the spark in the make-and-break system when a coil is used.

In the Ruhmkorff, or jump spark coil, shown in Fig. 2, the primary connections are the same except in the placing of a condenser in the circuit. The condenser, G, consists of alternate layers of tinfoil and paraffine paper, and are connected alternately to the electrodes of the battery F. Its function is to prevent sparking at the make-and-break device which gives a more abrupt primary interruption and a higher induced electro motive force in the secondary. The secondary is a coil, B, of fine copper wire wound over the primary but encircling it in the opposite direction. If one

is magnetized which draws the hammer and breaks the circuit. This demagnetizes the core and the vibrator falls back by the spring pressure and again closes the circuit. When the circuit is closed the primary causes the hammer to continually vibrate, similarly to a door bell or buzzer hammer, and at each vibration the interruption induces a current of high electro motive force in the secondary. Without the hammer, or vibrator, the spark will only occur when the primary circuit is broken after having previously been closed.

INSTRUCTING BUYERS

St. Louis, Mo.—Editor MOTOR AGE—Your recent editorial comment upon the man who sold his automobile for \$20 certainly has the right ring, as there is altogether too much carelessness exercised in the handling of motors. The trouble is mostly caused by the agents, who turn the cars over to purchasers without first having properly instructed them in operation and management. The manufacturers' association should take this matter in hand and compel all agents to give each purchaser at least a dozen thorough lessons, accompanied by an expert driver, before permitting the purchaser to take charge of the machine.

I am heartily in favor of automobile schools and trust that the time is not far distant when every city will have its school where all purchasers may be properly instructed in the management of cars.

An important point which is usually overlooked by agents in their instructions to purchasers is skidding, and the purchaser may drive a car successfully for months and then

have a serious accident because of skidding upon wet and smooth pavements.

When a car is driven at high speed on what may be termed a "slick" pavement, an accident will almost surely happen if the brakes are suddenly applied, as the car will suddenly slide around and strike either the curb or another vehicle, and the effect of such a collision at high speed may be to demolish the machine or the vehicle which it strikes, or both. Such accidents are becoming common and form a vexatious problem.

I am an advocate of the use of solid steel tires on automobile wheels, and I am safe in saying that had the automobile in the accident just mentioned been fitted with steel tires, the destructive skidding would not have happened, as the steel tires will adhere much more closely to a slick pavement than will the finest pneumatic tires.—JOHN C. HIGDON.

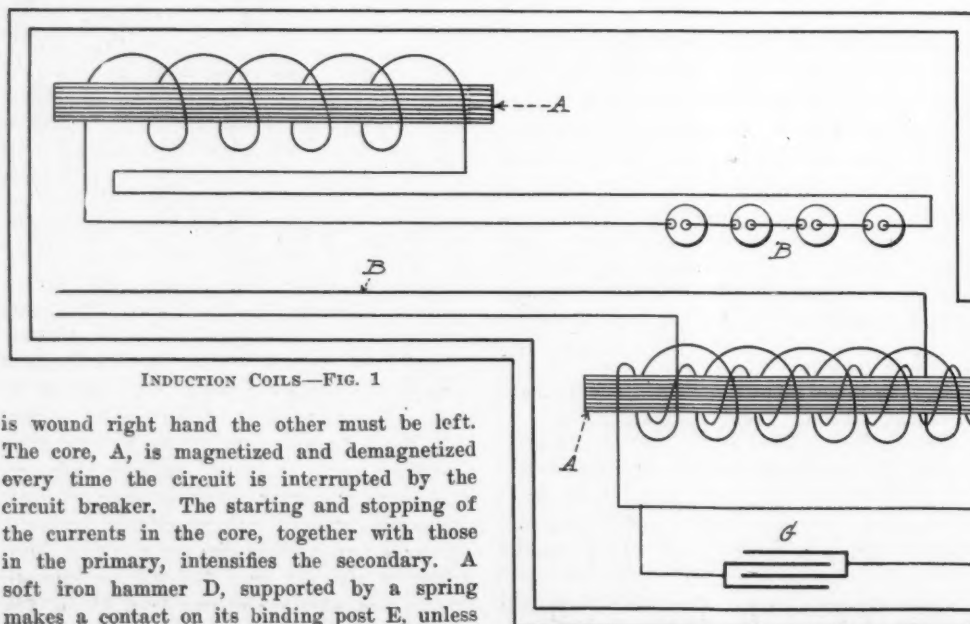
CLOGGED EXHAUST

West Liberty, Ia.—Editor MOTOR AGE—As I am very much interested in the Clearing House department I write to tell of a peculiar trouble I had with a small runabout engine. For some time I have been losing power. I looked over every part to see what might be the cause, but could not locate it until one evening I had to get some boys to help the engine pull me home, as it would not even pull the rig on the low gear. When I reached home I took off my coat and went at the car, and in some way I happened to take the muffler off. The exhaust pipe leading to it was filled with soot. I started the engine with the muffler off and it ran excellently. In taking the muffler apart I found the small pipes in it nearly closed with soot and rust, and after cleaning them I had no further trouble. This experience may help some other reader.—V. R. LANE.

THROTTLING TWO-CYCLE MOTOR

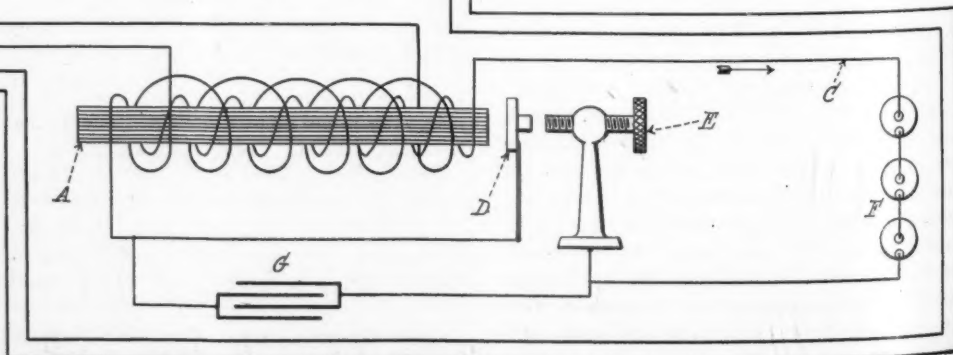
Reading, Pa.—Editor MOTOR AGE—Your reply in the issue of the August 11 to the two-cycle motor query is incorrect, for a two-cycle motor runs all right with a throttling carburetor, provided the crank case is tight. We run them either way and find very little difference. The Cushman motor, which attracted attention at the Chicago show winter before last, used a throttling carburetor.—CHARLES E. DURYEA.

A two-cycle motor cannot be run as well with a throttling carburetor, as was stated in MOTOR AGE. Throttling before the gas reaches the crank case has the effect of rarifying the gas in the base. The result is a slow burning charge in the cylinder, which continues burning after the inlet transfer port opens, producing base explosions. MOTOR AGE stated that it was advisable to throttle between the base and the cylinder, which is the case in usual two-cylinder motor design.



INDUCTION COILS—FIG. 1

is wound right hand the other must be left. The core, A, is magnetized and demagnetized every time the circuit is interrupted by the circuit breaker. The starting and stopping of the currents in the core, together with those in the primary, intensifies the secondary. A soft iron hammer D, supported by a spring makes a contact on its binding post E, unless the circuit is closed. When closed the core



INDUCTION COILS—FIG. 2

THE MOTOR CAR AND THE LAW



Six Mile Limit—In Boone, Ia., the automobile ordinance provides that no vehicle propelled by electricity, steam or gasoline may be driven at a greater rate of speed than 6 miles an hour.

They're Reasonable—An automobile ordinance is under consideration by the city fathers of Harrisburg, Pa., which when adopted will permit automobile drivers to speed at 12 miles an hour within the city limits. One councilman suggested 8 miles as the maximum, but the majority favored a more liberal proposition.

Quite Up-to-Date—The city council of New Ulm, Minn., has passed an ordinance limiting the speed at which motor cars may be driven within the city limits to 6 miles an hour. When within 75 feet of a street crossing a bell or horn must be sounded. Cars must be provided with lights strong enough to be seen 400 feet. Offenders will be punished with a fine of from \$5 to \$100.

Up to the Mayor—Owosso, Mich., is now on the list of villages having an ordinance. All applicants must apply to the mayor for a license, and if he is satisfied that the applicant is a responsible and careful person the license may be granted. The speed in the paved district must not be more than 8 miles an hour, and 12 miles anywhere else within the village. All cars must be provided with lamps, bells, or horns. Cars must be numbered and the figures must be at least 3 inches high. The number must also be painted on each lamp. The mayor may revoke any license and the violators of the law may get a fine of \$50 or 30 days in jail.

Fear Double Taxation—Owners of automobiles in Toledo, O., are now running up against the city board of review. The law regarding taxation of automobiles provides that all machines purchased after April 1 of this year are exempt from taxation until next year. The board is of the opinion there are quite a number of owners of automobiles who are trying to evade paying taxes, so notices were sent out asking all owners of machines to appear. A goodly number did not see the board, so these will be placed on the duplicate at fair valuations. All owners of automobiles in Toledo will hereafter, beginning with April 1 next, be required to pay an annual license fee of \$4. From the license record the review board expects to know all owners of automobiles in the city. Taxation and license make a double-header which the Toledo motorists must soon face.

Western Restrictions—The city council of Tacoma, Wash., passed an automobile ordinance some time ago which provides four different speeds at which motor cars may be driven within the city limits. The maximum speed is 12 miles an hour, the minimum is 4 miles an hour on streets running down a certain hill, while 6 and 8 miles an hour are the limits at which cars may be driven in other sections. Cars must be registered with the city clerk and a description of the vehicle given. A number will be issued and it must be displayed on the rear of the car. Drivers must be at least 18 years old and in case a car is transferred to another party, it must be reported to the city clerk

within 24 hours. A bell, horn or gong is required, as well as lamps in front and rear at night. Violators will be fined at least \$100 or imprisonment not longer than 30 days.

Nearly the Limit—Recently the councilmen of Cranston, R. I., passed an ordinance providing that motor cars must not be driven at a greater speed than 4 miles an hour on Broad street from Sheldon street to the Pawtuxet bridge.

Waiting a Few Days—The Kansas City automobile examining board will hold its first regular meeting Wednesday, October 4. Meetings thereafter are to be held on the first Wednesday of every month. Applicants for licenses are to be examined as to capacity, sobriety, skill and experience. No arrests for violation of the ordinance will be made until after October 1. It is probable that the city and the board will be enjoined pending the appeal in the case of Fred Patee, who was recently fined \$10 in Central police court for violating the ordinance.

All Sorts of Speed—An automobile ordinance is now before the city council of Seattle, Wash., providing that within the business district of the city motor cars may not be driven at a greater speed than 8 miles an hour. In another section no cars may be driven at more than 12 miles an hour upon any paved streets. On any other streets within the city limits the speed limit is 15 miles an hour. Street crossings must not be crossed at a greater rate of speed than 4 miles. Every car must be equipped with a bell, gong, horn or whistle, and a lamp projecting a white light in front and a red light in the rear. All cars must be numbered in white letters, which must be at least 2 inches high and in case of an accident the motorist must report it and give his name and address to the nearest police station.

Swiss Regulations—The Swiss states, with the exception of four, have enacted a common automobile ordinance. It provides that the maximum speed, even on level roads, must not exceed 18½ miles per hour; in villages and on mountain roads where motor cars are permitted to drive, the speed of 6 miles per hour must not be exceeded, while upon bridges, in narrow streets, at corners and wherever a special sign is located, the motorist must slow down to about 4 miles an hour. When approaching a corner and when the motorist is about to pass a horse-drawn vehicle he must sound his horn. At night the car must have a green light on the left side and a white light on the right side. In the rear a red light must show at all times. When the driver gets out of the car he must also stop the motor. When an accident happens, even when the motorist is not responsible, he must stop the car and help the injured. All Swiss motorists must carry numbers on their cars, also the marks of the department where they reside. When requested, a driver must show his license and give his address, as well as state the next locality where he will stop. Each state will punish offenders as it sees fit and may forbid motorists upon whatever roads it thinks ought to be closed



to motoring. A village or a district cannot punish an offender arbitrarily, but must punish according to the state law. In the state of Grosens, the automobile circulation is entirely forbidden.

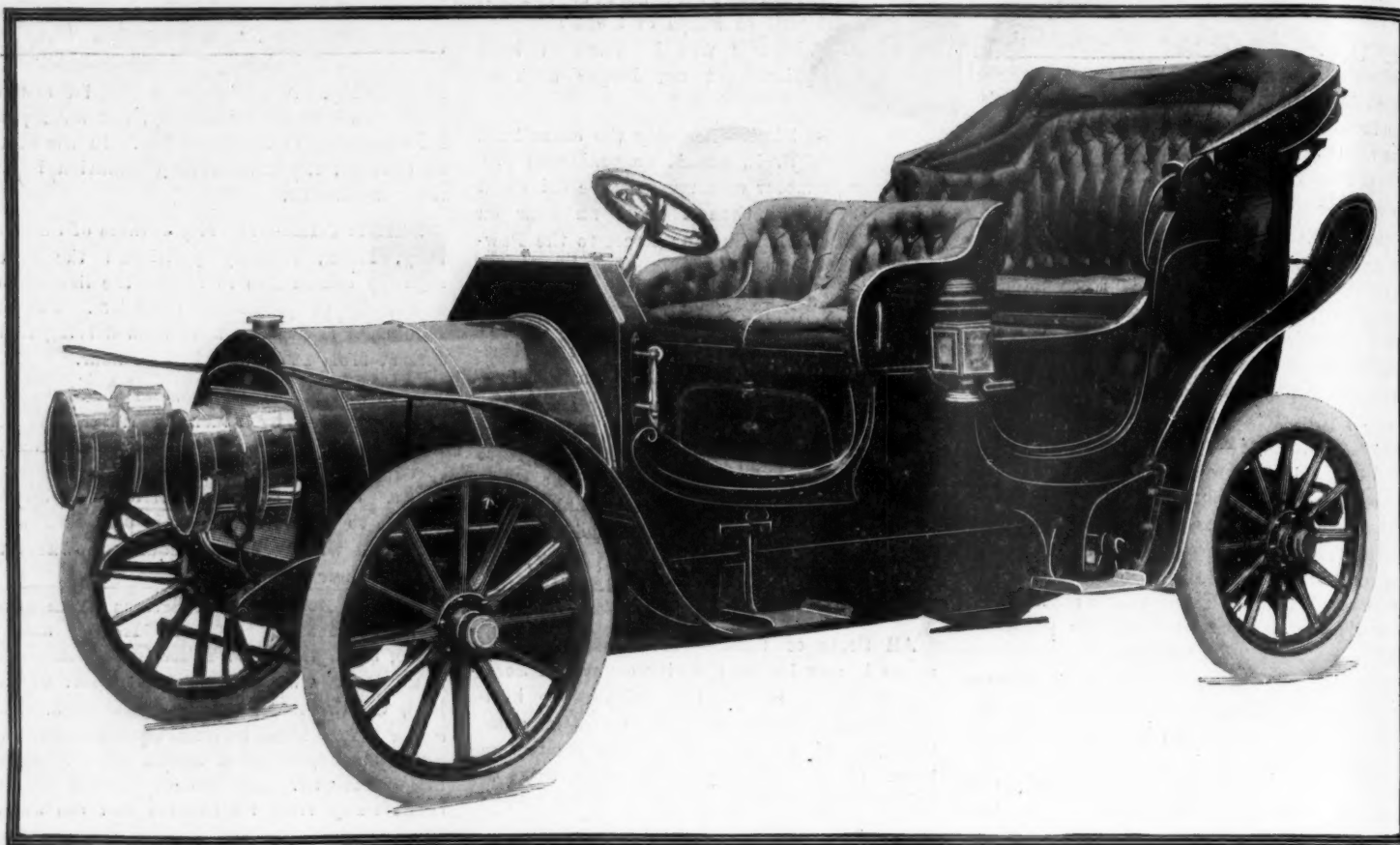
Terrible Crime—The city fathers of Shrewsbury, Mass., recently petitioned the state highway commission to revoke the licenses of a number of prominent motorists. The offenders, it is claimed, have been driving their cars at from 22 to 30 miles an hour.

Good and Bad—An automobile ordinance is being prepared by Alderman Haven, of Duluth, Minn., and will provide a maximum speed of 15 miles an hour within the city limits. In the business district 8 miles an hour is to be the limit. It is possible that a provision will be added requiring owners to number their cars.

Sensible Decision—The actions of an automobile, belonging to Fred Koella, and a horse, belonging to G. T. Hederer, formed the basis for a lawsuit in the city court of Toledo, O., the latter part of last week. The owner of the horse had the equine hitched to a telephone pole when Koella came along in his automobile. The animal became scared, broke away from its harness and ran away. The plaintiff claimed considerable damage was done and therefore brought suit for \$300. In deciding the case Judge Pratt made a clever statement that the animal had no business to lose its head, get frightened and prance about just because a touring car happened to come along the street and make a noise. The motorist therefore won the case, the cost of the trial being put on the plaintiff, in addition to his standing the loss on his driving equipment.

Here's All of It—According to the automobile ordinance which was signed a few days ago by the mayor of Rock Island, Ill., all cars must be registered with the city clerk and particulars concerning the car must be given to file. After the registration the owner will be given a seal, circular in form and not over 2 inches in diameter, upon which will be the following inscription: "Registered in the office of the city clerk of the city of Rock Island, Ill.," and the registration number. The seal must be conspicuously displayed on the car. The number of the car must also be displayed at all times on the back of the vehicle. The numerals must not be less than 5 inches high, with a space of ¾ of an inch between each. When a car is sold or exchanged it must be reported to the clerk and the name and address of the contracting parties given to him with the particulars concerning the machine. Cars must not be driven at a greater rate of speed than 1 mile in 6 minutes. When the driver of a horse-drawn vehicle signals to a motorist to stop he must do so. All cars must be provided with brakes, a bell, horn or any other warning signal; at street crossings and public squares the signal must be sounded. All cars must have at least one lamp having a red light and another having a white light. A fine of not less than \$10 will be imposed for the first offense and one from \$10 to \$50 for a further violation of this very stringent ordinance.

THE FIELD OF AUTOMOBILE DEVELOPMENT



THE NEW WORTHINGTON BOLLEE CAR

WILL MAKE BOLLEE CARS

The Worthington Automobile Co., 574 Fifth avenue, New York, has acquired the exclusive license for America for the manufacture and sale of the Leon Bollee cars, and pending the completion of works arrangements have been made for importing these cars from the Bollee works at Le Mans, France. The first of these cars, which will be known in this country as the "Worthington Bollee," specially built from plans furnished by the Worthington company, has been received. The car just arrived is of the four-cylinder type and is not at all complicated; its engine is well balanced, running with little vibration or noise. It has a handsome, specially designed phaeton body with folding leather hood. The body is finished in a rich dark green color with black molding and pale green striping—wheels and running gear to match. The upholstery is in the finest and heaviest of leather, with bands of coach lace to match. The folding hood is made of heavy grain leather and when folded down makes a perfect dust screen. A glass in a mahogany frame screens the tonneau from the divided front seats. Folding storm aprons, which are arranged to button all around, afford complete protection against the weather. The tonneau seat in its full, rounding design, resembles a tete-a-tete, and with the broad side entrances a novel but pleasing carriage effect is produced. An original and attractive feature of the design is that no part of the frame of the chassis is in sight, being all covered up by the body, giving a smooth coach finish instead of the usual metal and bolt aspect so pronounced on many high priced cars. The Worthington people assert that the Bollee is par excellence the automobile for rapid and hard touring work and also that it is an ideal machine for city use; this it may well be, as

it is remarkably quiet and silent in operation. It is interesting to note that before placing the Bollee car on the market it was tested by trials extending over more than a year, during which time it was run more than 25,000 miles, and as it came out of these trials with flying colors it must be thoroughly suited for the purpose for which it was designed.

THE FOUR-CYLINDER FORD

On account of the quickly created popularity of the Ford two-cylinder runabout and light tonneau car, made by the Ford Motor Co., of Detroit, Mich., considerable interest has already been displayed in the new four-cylinder touring car which the company is just now completing. This car is scheduled as a 1,600-pound side entrance vehicle and while in general purpose is conventional enough it is possessed of numerous features of marked individuality.

The wheel base of the car is 92 inches and the gauge 55½ inches. The wheels are 32 inches in diameter, of the wood artillery pattern, with twelve spokes, and fitted with 3½-inch tires. The hubs of the front wheels are of pressed steel and are fitted with ball bearings, the balls being ¾ and 7-16-inch in diameter respectively for the inner and outer rows.

The front axle is a one-piece drop forging of I section, with forked knuckle ends. The knuckle pivots are slightly inclined, to bring the center of rotation of the axles as close over the contact of the wheel with the ground as possible. The pivots have long bearings, and are provided with small lubricators on top. The knuckle stub axles are drop forgings and the knuckle pins and bushings are of tool steel, hardened and ground.

The rear axle is of the divided live pattern. It is of steel, 1¾ inches diameter, with a ½-inch central hole. The inner ends of its two sections are fitted in the usual way to a

Warner spur gear differential of special pattern. The live axle runs on ball bearings fitted within the surrounding sleeve at the outer ends and within the gear casing at the middle. The outer-end bearing balls are ¾-inch in diameter, while those of the two rows in the gear casing are respectively 7/8 and ¾-inch, the heavier bearing being used on the left side of the gear, upon which side bears the thrust of the driving bevel gear. The outer ends of the live axle sections are solid, this construction being secured by butt end electric welding. The axle sleeve is of 2¼-inch steel tubing with a wall thickness of approximately ½-inch. Its sections are brazed to the differential gear case. Tension rods underneath, extending from the gear case to the axle ends brace the structure. The spring pads are attached by means of a clamp action, their socket portions being split. They form, also, the supports for the inner ends of the emergency hub brake rockers. The rear wheel hub shells are of cast steel with pressed steel outer spoke flanges. Extending forwardly from the cast steel differential case is a drawn steel sleeve in which is formed the rear support of the propeller shaft. This support comprises a double ball bearing. The forward bearing is of ½-inch balls, while the rear bearing which abuts against the propeller shaft end bevel pinion is of 1½-inch balls.

The propeller shaft extends forward through a steel tube to a Hooke universal joint, which is enclosed in a globe casing. The steel tubing sleeve is fastened to this globe casing and to its hub or sleeve are fastened the forward ends of two double taper steel tube strut rods extending forward, respectively from the right and left rear axle spring pads.

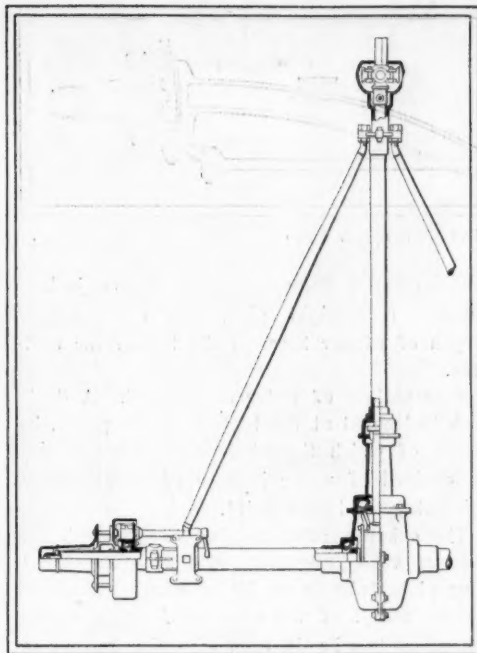
This triangular rear axle structure is the most striking feature of the Ford running

gear. It is patented and was briefly described in *MOTOR AGE* some months ago at the time of the issuance of the patent.

Pressed steel construction is used in the running gear frame, which is 108½ inches long and 26 inches wide. The side members are of the usual tapered channel section, being 4 inches deep at the deepest portion, 1½ inches wide uniformly over the flanges and ¼-inch thick. There are only two cross members, one in front and one in the rear, these being also of pressed steel, and united with the side members by riveting to malleable iron connections at the corners. These connecting pieces are made in channel form to reduce their weight and those in the rear extend outwardly sideways, and are drilled at the outer ends to receive short, heavy steel studs for pivot connection with the top spring saddles. The rear cross member of the frame has an upward bend at the center to afford spring action clearance over the differential gear case.

The frame is supported on semi-elliptic springs in front and on full elliptic springs in the rear, the latter being chosen to render the tonneau seats as comfortable as possible. These springs are 42 inches long and 2 inches wide. The front springs, which are 38 inches in length, are swung outside the frame and supported on the axle 4 inches forward of their longitudinal center. The reason given for this peculiar disposition of the springs is that the shortened front section thereby serves better to transmit the tractive force from the frame to the axle, and that the lengthened rear section is given additional shock absorbing ability. The front ends of the springs are hung on stubs projecting from the frame corner pieces and the rear ends are shackled in the usual manner to forged hangers depending from the frame.

The motor cylinders are of 4-inch bore by 5-inch stroke and each is an exceptionally simple casting, being a plain cylinder without integral head, and with a shoulder at the bottom for attachment to the crank case. Each combustion chamber or cylinder head is a separate water jacketed casting, fastened to its cylinder by an internal sleeve or tube which



ONE-HALF OF FORD REAR AXLE STRUCTURE

is right and left threaded to draw the two together. Each of these internal double nuts has an inside diameter of 1¾ inches and is provided with diametrically opposed longitudinal spanner slots.

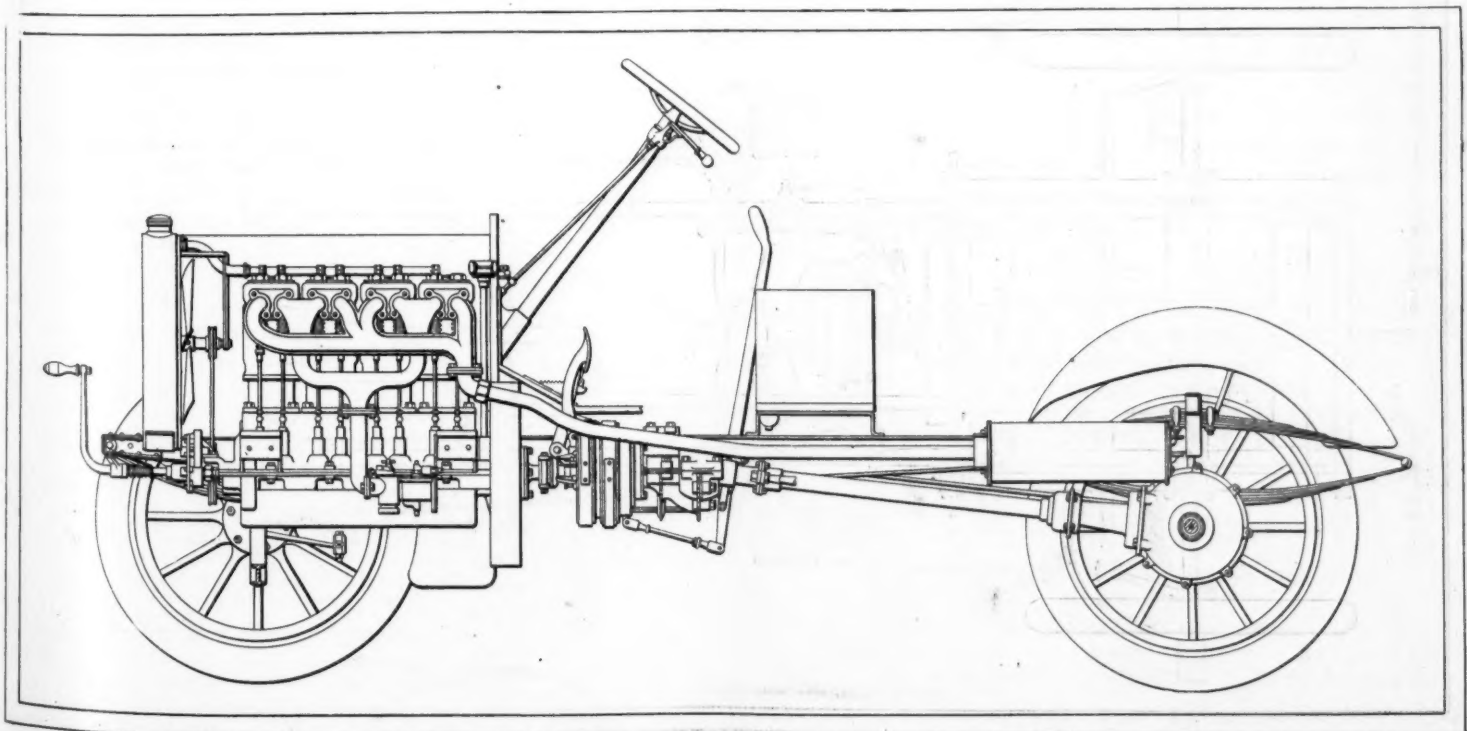
The cylinders themselves are copper water jacketed. The copper piece is in thimble form with a central opening in its head. This head is clamped between the cylinder and the combustion chamber when the two are screwed together in assembling. Communication between the combustion chamber and cylinder water jackets is provided by spaced openings in the head of the copper jacket. At its lower end the jacket, which is here slightly contracted, is forced over a cylinder flange and secured by a tight fitting ring.

Four 9-16-inch bolts, locked with cotter pins, secure each cylinder to the two-part aluminum crank case. This is split horizontally and from its upper half extend the integral arms that support it from the chassis main frame, there being no sub-frame.

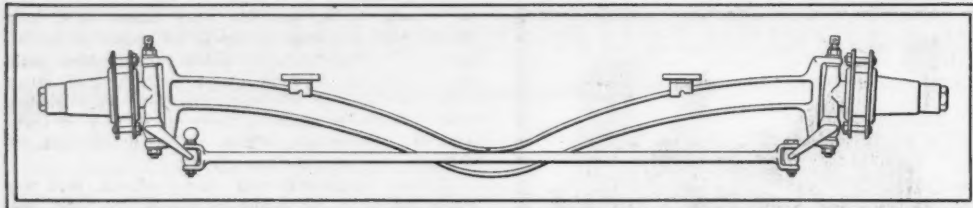
Both the inlet and exhaust valves are on the left side of the motor and all are mechanically operated. The valve chambers are integral with the combustion chambers. All valves have 45-degree seats, are 1¾ inches in clear diameter and are interchangeable. The valve action comprises the usual cams on a two-to-one gear shaft, cam followers guided by brass bushings in the wall of the crank chamber, and long intermediate push rods striking the valve stems. The push rods are held in place by slipping into holes in the ends of the valve stems and cam followers respectively. Coil springs furnish the return or seating action. The cam shaft pinion is secured to the crank shaft, just inside the outer bearing. The cam shaft, with its cams, is entirely enclosed within the crank casing, and the valve operating mechanism therefore works to good advantage as regards lubrication. The cams are of steel, hardened and ground, and are pinned to the shaft.

The pistons are of grey iron, said to be ground .0015-inch under cylinder diameter, and have four ring-grooves, three at the top and one at the bottom. The four piston rings are eccentric, ground on the faces and circumference under compression, to .0005-inch over size. The drop forged steel connecting rods are of I section, 10 inches long center to center and with brass bushings in the piston end, split, and adjusted by a screw in the top rod end. The lower end of the rod is babbitted, and has a hinged cap, which is cut away on each edge on the idle side, to permit free oil access.

Five bearings support the drop forged crank shaft, these bearings being held by the upper section of the crank casing so that the lower half may be easily removed. The crank shaft journals are 1¾ inches in diameter by 1.15-1.16 inches long. The bearings are finished by grinding. At its rear end the cam shaft drives a vertical shaft through equal size spiral gears. This shaft operates the *Lunkenheimer* mechanical force feed lubricator on the dash board, and a Herz ignition timer. The forward end of the cam shaft directly drives the gear water circulating pump. The water cooler fan is driven from a pulley on the crank shaft by a spring belt of coiled wire. The crank shaft



SIDE ELEVATION IN PARTIAL SECTION OF THE FORD FOUR-CYLINDER CHASSIS



THE FRONT AXLE OF THE FOUR-CYLINDER FORD

extends forwardly for the application of the starting crank.

A Kingston carbureter supplies the fuel. It is on the left side of the engine and the feed is through a manifold pipe line of ordinary arrangement. The carbureter is provided with a throttle for engine speed control. The gasoline tank, which is under the front seat, contains 15 gallons of fuel.

Ignition is by a jump spark system with four induction coils, these being Huff vibrator coils, carried at the side of the bonnet in an aluminum case. The current is supplied by a three-cell storage battery. The spark plugs screw into the tops of the combustion chambers. The Herz timer, driven as previously explained, is underneath the bonnet near the dash and is connected with a spark lead hand lever on the steering column, just under the wheel, where also is disposed the throttle lever.

The cooling system comprises a Whitlock cellular radiator fan and gear pump. The fan is carried in a bearing supported by braces secured to the radiator. The pump possesses the novel feature that the suction and delivery, instead of being located on opposite sides of the pump case, as is usual in this type of pump, are both on the same side, by which means a considerable simplification in the water connections is effected. This end is accomplished by casting the pump case with a double wall from the natural outlet between the two gears, around to the opposite side. The pump takes the water from the bottom of the radiator and forces it through a short length of hose pipe, and brass connectors brazed to the copper water jackets, into the bottom of the jackets. The

water returns from the top of the jackets through a straight pipe, also containing a length of rubber hose, to the top of the radiator.

Five gallons of water are carried. A drain cock is located at the bottom of the pump, by means of which the whole cooling system may be drained of water in case of cold weather, this being the lowest point.

The exhaust, after passing out through the exhaust valve tube system, passes through a long plain tube to an 18 by 6-inch cylindrical muffler ahead of the rear axle. This muffler comprises two heads, each of which has a central integral tube whose open inner ends are concentric and closely adjacent. Around this central divided tube are four concentric shells communicating by way of $\frac{1}{4}$ -inch perforations. The exhaust enters the central tube through an opening in one head and is somewhat cushioned in the central compartment. It then escapes through the opening between the adjacent ends of the tubes forming the inner compartment, and finally passes from one concentric compartment to the next, and lastly to the atmosphere, through the perforations in the shells.

Different from all other four-cylinder cars of its type this machine has a two-forward-speed and reverse planetary transmission gear instead of the usual sliding gear outfit. This unusual feature has been adapted because of the fact that it is intended that most of the driving be done on high speed or direct drive, and that hence the use of the low speed gear being only occasional the planetary system serves the purposes as well as a sliding gear set and at the same time renders more expeditious

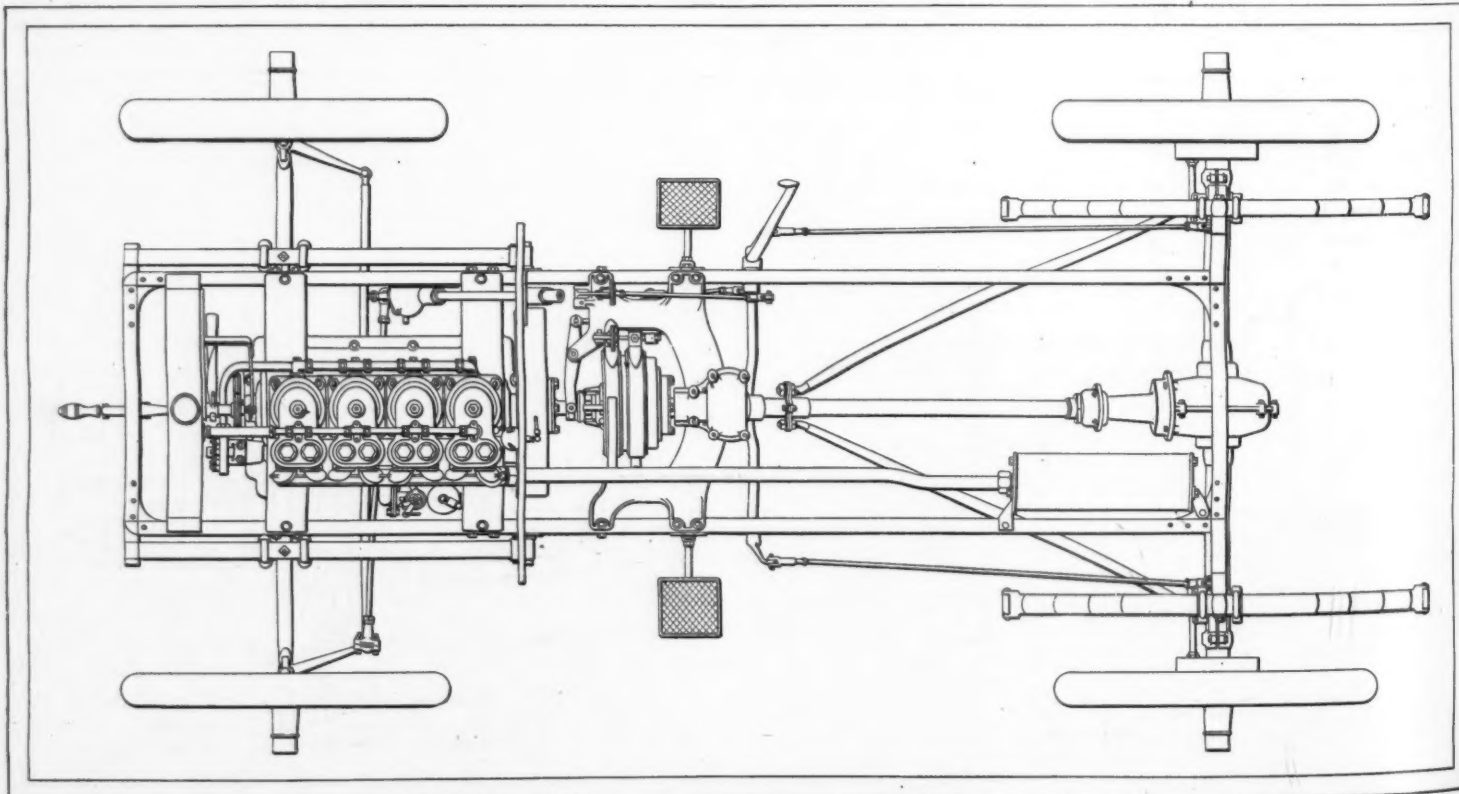
both the construction of the car and the handling of it.

The transmission gear is carried at its forward end by a shaft bolted to the 18-inch fly wheel, and at its rear by the final transmission sleeve which transmits to the Hooke universal joint and which, as well as the universal joint casing, is supported by a cast aluminum frame hung directly from the main frame side bars. This aluminum sub-frame also serves to support some of the operating levers and their connections.

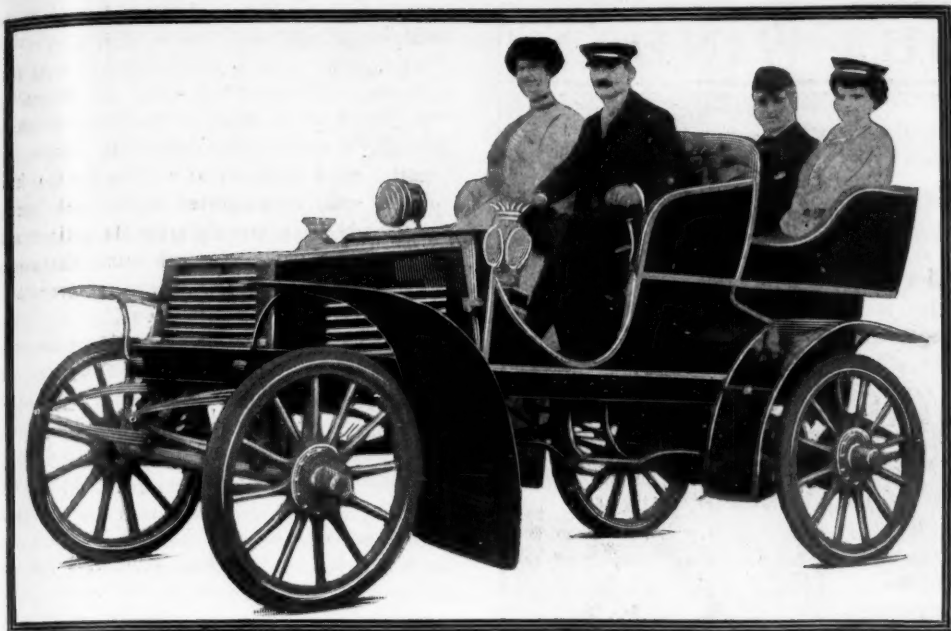
The gear itself comprises a two band set with three sets of planet gears for each speed change. There are no internal gears. These speed brake bands are steel strips $1\frac{1}{2}$ inches wide by 1-16-inch thick, lined with a $\frac{1}{8}$ -inch thickness of vulcanized fibre. The band ends are drop forgings and the suspension-bracket is disposed so as to hold the enclosed brake ring clear of its band-surface, reducing wear and friction. The brake bands are operated by a single lever having three unlatched positions—extreme forward position for high speed, extreme rear position for low speed, and neutral in mid-way position, in which position the reverse brake band may be applied by the reversing pedal.

The speed ratios in the change gears are for low forward three turns of the crank shaft to one turn of the propeller shaft; reverse, five turns of crank shaft to one turn of propeller shaft; high speed or direct drive, the same revolution of crank shaft and propeller shaft. The propeller shaft pinion has fifteen teeth, engaging a forty-eight-tooth bevel gear on the rear axle, thus giving a final reduction ratio from the engine shaft to the rear axle of 3.2 to 1 on the high speed; 9.6 to 1 on the low speed; and 16 to 1 on the reverse. A sheet metal apron to protect the friction bands from mud, dirt, etc., is arranged under the transmission gear.

The only brakes are the rear hub brakes. These are of the internal expanding pattern, contained in drums integral with the hubs. The brake expanding members are supported



PLAN VIEW OF THE CHASSIS OF THE FOUR-CYLINDER FORD



J. E. HASCHKE'S ELECTRIC TOURING CAR

at the middle of their length on disks fastened to the outer rear axle fittings. They are faced with hair felt, and are expanded by means of a cam on a shaft having bearings in the disk and in a bracket extending forward from the outer rear axle fittings. The brakes are pedal actuated, the pedal having a ratchet form of lock.

The steering is by column and wheel in which set the steering shaft carries at its lower end a drum with an internal worm thread of 2-inch pitch, meshing with an internal hardened worm gear having secured to it a downwardly extending steering arm. The movable part of the irreversible steering mechanism comprises a portion of a spherical surface which moves on a similar internal spherical surface of the stationary part, thus forming a substantially dust-proof casing. The joints of the connecting rod from the steering arm to one of the steering knuckles are of the adjustable ball and socket pattern. The steering column has a considerable rake, and the wheel is 14 inches in diameter.

The body contemplated for this car is a modern five-passenger side entrance affair with the usual complement of equipments.

HASCHKE'S ACCUMULATORS

J. E. Haschke, of Chicago, a veteran storage battery maker, is devoting considerable attention to the study of electric vehicles for touring and has built a vehicle in which it is claimed he recently made a trip of 103 miles on one charge. This car is fitted with a 70-volt Haschke multiple series battery weighing 950 pounds and having a capacity of 180 ampere-hours. Mr. Haschke says the car makes a speed of about 15 miles an hour at a current consumption of 28 amperes and a speed of 25 miles at 38 amperes. Below is Mr. Haschke's description of his multiple-series battery:

Up to about 4 years ago I had put into commercial use about 18,000 cells of this battery, some of which are now nearly 10 years old and are yet in daily service. But for the last 4 years I have devoted most of my attention to the laboratory, only making such batteries as were to be used for special purposes, as rough handling, excessive charging and discharging such as the Haschke carbon point demands in its various forms of electro-metallurgy—i. e., the Haschke carbon point consists of a carbon rod $1\frac{1}{2}$ inches thick attached to a portable handle and with this a dead short circuit is made, whereby only the arc is left in

the circuit as the resistance, and as I always use from thirty to forty cells in series the discharge rate ranges from 350 to 500 amperes.

When I operate at continuous work, such as the wrecking of large iron tanks, then I often have to recharge the battery with such a high rate of current, and discharge often at the same time, that the rubber jars became so soft that they would often burst open, and in each case I always used an equipment taken out of one of my automobiles. I have so far, for the United States government and others, perforated over 100 safes and vaults and have wrecked more than a thousand tons of iron and steel tanks, water pipes, boiler basins, I beams and girders, and never as yet have the battery elements gone back on me in such operations. Most all storage battery manufacturers in the last few years have found that it is best to use, especially for short hour discharge work, a thin plate or element, as great expansion force is created when a thick plate is called upon to discharge its energy from its interior, which is partly due to poor electrolytic circulation.

By comparing this compound battery with the old one, we may figure thus, referring to a stanhope size: Forty rubber jars expose their respective two side walls between each set of elements. This consists, if measured, about 13 2-3 square feet of insulating material that is placed between active plates, and whereas each wall

is $\frac{1}{4}$ -inch thick, we also have these eight side walls, which occupy a space of 6 by 8 by 10 inches. Furthermore, as these forty rubber cells are connected in most cases with a lead strap from one cell to another, therefore at 6 inches each this would make a total of 20 feet of strip lead in the circuit, which no doubt creates resistance in the external circuit.

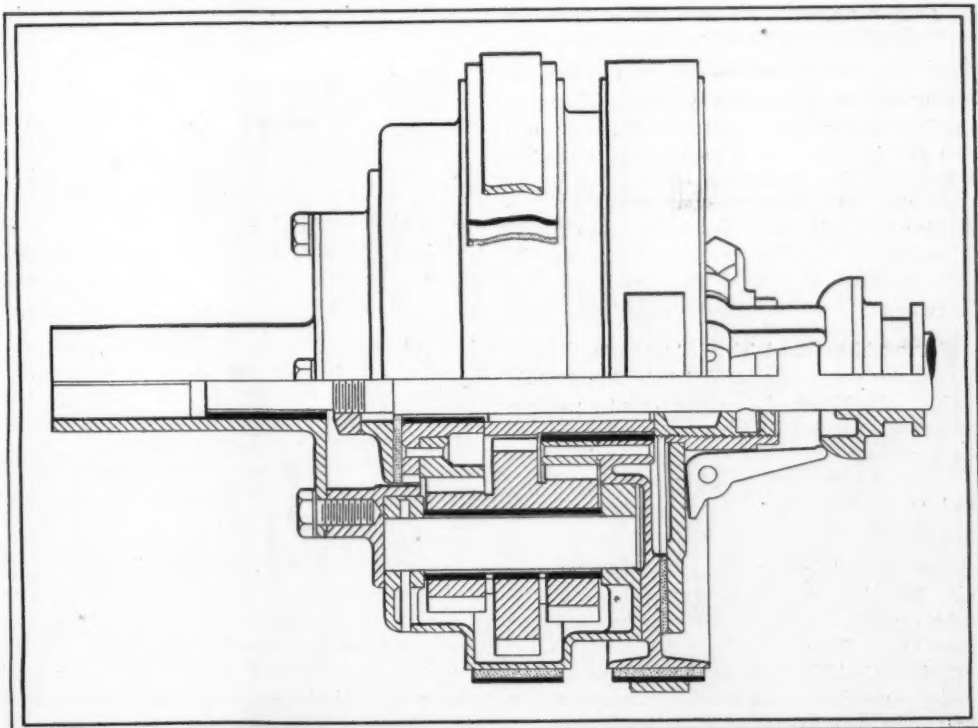
In this compound cell these rubber jars are dispensed with, no connecting lugs are used, nor is any portion of the battery even hermetically sealed, the whole battery being open for inspection. The outside containing portion, or tray, measures less than the old battery of wooden trays. Therefore by saving the cost of forty rubber jars, which are of fragile material and which cost about \$75, this compound battery can be constructed for considerably less.

At present I have a large five-passenger Waverly touring car equipped with this battery. It is fitted with a 70-volt Haschke compound battery—three 20-volt and one 10-volt battery—and has been tested for the last 3 months with excellent results. A 20-volt battery of this set measures 24 inches long by 14 inches high by 9 inches wide, the whole set weighs about 950 pounds, and has a capacity of about 180 amperes, and when the car is running on the second speed at about 15 miles per hour the current consumption is 28 amperes. Therefore this will give a total mileage, on the paved streets, of about 97 $\frac{1}{2}$ miles on one charge. Counting coasting and rests I believe a mileage of 100 can be made. An 80-volt stanhope battery of this type will weigh about 800 pounds and have a capacity of 160, and at the current consumption of about 25 amperes the mileage at 15 miles per hour will be about 100.

In this battery there would be three positive and three negative plates, each plate would be 9 inches high and 35 inches long, making a total of nearly 15 feet of positive plate surface exposed to action.

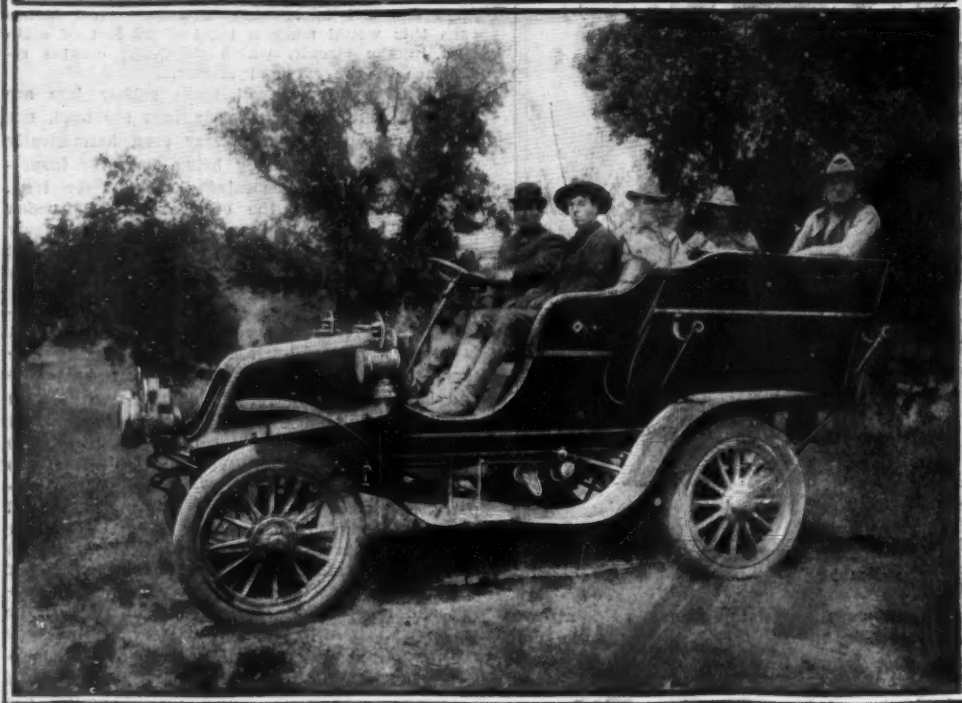
The positive plate in this battery is $\frac{1}{4}$ inch thick and the negative 1-16 inch thick. The great life of this thin plate for short-hour work, as for traction-work, has long been demonstrated. For automobile propulsion and various forms of electro-metallurgy purposes others would like to use such a plate, but they have no insulating medium that will permit it. It is a well known fact that the expansive force of the active material in a battery is tremendous, therefore I distribute it in small particles, thereby reducing this defect to a minimum.

This battery can be reserved after being discharged without great injury for 6 months' time, because the active material is not thick enough to retain the surplus sulphate, and then again it can be brought to action quickly because the active matter is thin in cross section, which permits a high and complete chemical action at short notice.



HALF SECTIONAL VIEW OF THE FORD PLANETARY TRANSMISSION

FROM THE FOUR WINDS



A WINTON CAR IN U. S. ARMY SIGNAL CORPS SERVICE

Sixty on the Run—The second run of the Ottumwa Automobile Club, of Ottumwa, Ia., was made last week. Eighteen cars carrying about sixty passengers took part in the run, which was to Fairfield and return.

Nearing 500 Mark—Twenty-four new members were admitted last week by the Chicago Automobile Club. The membership now is 475 and it is likely that the 500 mark will be passed within a few weeks.

New Vermont Club—The Burlington Automobile Club was formed in Burlington, Vt., September 21. Dr. D. C. Hawley was elected president; O. S. Presbrey, vice-president; E. A. Brodie, secretary; G. A. Churchill, treasurer. The new organization has already twenty-five members.

Laudable Undertaking—At a recent meeting of the members of the Automobile club of Wilkesbarre, Wilkesbarre, Pa., it was decided to start a movement in the county having as its object better roads. The club members will watch the work of the constables and if they fail to make correct reports concerning the conditions of the roads the club will warn them as well as the municipalities for which they make the reports, and if necessary will bring action against the municipalities to compel them to repair the highways.

Making New Road Map—At the last meeting of the trustees of the Toledo Automobile Club W. D. McNaull was appointed as chairman of a committee which he is to select for the purpose of securing all necessary information for the publication of a new up-to-date road map. To the representative for MOTOR AGE Mr. McNaull stated that the map would be out early in the spring. He furthermore said that there were numerous investigations to be made of the best highways in all directions from Toledo. During the recent touring through Toledo from New York to St. Louis a number of automobiles were driven out of the way as far as 13 miles in view of there being no road map to guide the drivers.

Mr. McNaull said that the new map would correct any and all difficulties so far as the committee was able to find the best and shortest routes.

Lee Bought from Lee—Dr. Carl M. Lee is the first Chinaman in San Francisco, Cal., to own an automobile. He purchased a Cadillac car from Lee Cuyler, the local agent for the Detroit machine.

Automobile for Inspection—By a vote of six to five the civic works committee of Toronto, Canada, decided that Assistant City Engineer Fellows shall have an automobile instead of a horse and buggy for inspection work.

Association, Not Club—The Delaware Automobile Association was organized in Wilmington, Del., and elected Pierre S. du Pont as president; William G. Mendinhall, vice-president, and Willard C. Jackson, secretary-treasurer.

First Limousine on Coast—John D. Spreckles, of San Francisco, Cal., recently received a White steamer limousine, the first of its kind ever seen on the coast. The car will be principally used for theater parties and other evening affairs.

Want Access to Park—At a recent meeting of the Automobile Club of Pittsburg it was decided to take action against the decision of the park commissioners forbidding the driving of automobiles in Riverview Park. A committee was appointed and will call upon the officials and if the latter do not give satisfaction a motorist will drive through the park for the purpose of being arrested and thus enable a test case to be started.

Drummers Use Automobiles—It is expected that quite a number of traveling men from Peoria and Pekin, Ill., will use automobiles next season instead of making their trips on the railway. Some traveling men have tried the new method this summer and have been successful in doing more business, in covering more territory and in cutting down former ex-

penses. It is claimed that one man while traveling in his car met eight farmers on the roads within a month, all having had a breakdown of their horsedrawn rigs. The drummer took them home in his car and as a result sold new buggies and other goods.

Riggs with Fisk—Frank Riggs, who has been for some time with the Cadillac Automobile Co., of Detroit, Mich., has been appointed general western manager with headquarters in Chicago, Ill., of the Fisk Rubber Co., of Chicopee Falls, Mass. Hereafter all western business of the company will be handled from the Chicago branch.

Ten Cars Started—There were ten cars which started in the final run of the Rhode Island Automobile Club Saturday afternoon, the destination being Barre, Mass., where the night was spent. The roads through this section are of the very best, and the scenery all along the route is as picturesque as any to be found in New England.

Good for Tourists—The Touring Club of Italy, with headquarters in Milan, has issued an automobile annual which contains a great many interesting and valuable information concerning motoring in Italy and other foreign countries. It contains a list of owners, manufacturers, dealers of automobiles and motor cycles in Italy; a list of all the European automobile and motor cycle clubs, custom house regulations in various countries; a list of the principal hotels recommended by the Touring Club of Italy in Italy, Switzerland, part of Germany and France.

England Buys Much—During last May, England purchased 417 motor cars, forty-two motor cycles and parts and accessories of a total value of \$956,075.65 from France; forty-one cars, sixty-seven motor cycles and parts and accessories of a total value of \$103,547.50 from Belgium; thirty-seven cars and parts and accessories of a total value of \$70,436.55 from the United States; twenty-two cars and parts and accessories of a value of \$43,281.40 from Germany; eight cars, one motor cycle and parts and accessories of a total value of \$12,886.45 from Holland. The value of all the cars, motor cycles, parts and accessories imported by English concerns since the first of this year amounts to \$4,767,297.80.

New England Curiosity—A curiosity in the line of automobiles arrived in Providence, R. I., last week and it showed that one fakir who goes from town to town selling all sorts of things is an up-to-date person. When first seen coming over the roads the curiosity looked like an ordinary automobile delivery wagon, with lime-light fixtures, but the details of its construction are marvelous. It is a steam delivery wagon made by the Mobile Co. of America, which produced wagons of this type fully 6 years ago. Mounted on a pipe which ran up at each side of the forward part of the top of the machine was a row of lights, and the standard which supported them was surmounted by a piece of brass of fleur-de-lis design. In the rear were two more rows of these lights on each side of the top, and built out from behind was a platform supported on the springs of the wagon. It is on this platform that the driver, M. J. Voxie, stands and delivers his lectures to crowds of people in the country towns and sells contrivances used to press trousers. He has all of his lights going while he is doing this sort of work and the crowds he gets are something wonderful, he

says. During the present season he has journeyed from New York city to Eastport, Me.

Moved Few Doors—The Philadelphia branch of the B. F. Goodrich Co. has moved from 922 Arch street to 909 Arch street.

Autocar in Philadelphia—The Autocar, manufactured by the Autocar Co., of Ardmore, Pa., will be handled in Philadelphia, Pa., by the Keystone Automobile Co. after October 1.

Has Two Good Lines—M. C. Blackman, of Syracuse, N. Y., has closed a deal for the Pierce and Columbia machines next year and will handle them at his garage in South Warren street. A large number of tourists are now stopping at the place.

Handles Whites and Ramblers—Henry Merrill, of the Kansas City Automobile Co., has leased a building one block south of his present quarters in McGee street for a term of 5 years. He will handle the White and Rambler exclusively next season. He has already sold three 1905 Whites.

Placed General Agencies—The agency for the Michigan light touring car, manufactured by the Michigan Automobile Co., of Kalamazoo, Mich., has been taken by the following concerns: Newark Automobile Co., Wright and Brunswick streets, Newark, N. J.; H. D. Clark, Jr., & Co., 217 East Fifteenth street, Kansas City, Mo.; W. H. Whitesell & Co., 604 South Broadway, Los Angeles, Cal.; Electric Supply Co., 309 Bull street, Savannah, Ga.

Enough for a Club—Of the seventy-five automobiles owned by residents of Wichita, Kan., twenty-one were purchased this season. Seven are Oldsmobiles, three Fords, two Ramblers and one each Winton, White, National, Locomobile Crest, Cameron, Courier, General and Orient. The local dealers are reported to have sold more than forty cars to out-of-town people, and in some instances the dealers could not get all the cars they really could have sold.

One Buffalo Agent Quits—The first of the changes which the MOTOR AGE man at Buffalo hinted recently would take place among the retail tradesmen of that city came this week. The Main street store of the Buffalo Motor Car Co. was closed for good. It is understood that the proprietor, William N. Mount, will quit the business. The company's line included the Columbia and the Pope-Hartford. Stephen L. Stone, formerly a member of the concern, which started into business about the time of the latest national show, left the company some time ago and has been with the Centaur Motor Co., of Buffalo.

Lewis Succeeds Wagner—At their last meeting the governors of the Buffalo Automobile Club elected D. H. Lewis to succeed F. J. Wagner as secretary. They passed a resolution expressing high regard for the work Secretary Wagner had done for the organization. Mr. Lewis is one of the best known motor car dealers in the city. He is secretary of the Buffalo Automobile Trade Association, was joint manager with Mr. Wagner of the 1904 Buffalo automobile show, and is a member of the runs and entertainment committee of the club. In signifying his willingness to become secretary of the club Mr. Lewis told the governors that he would be able to devote a good deal of time to the affairs of the club. It is expected that he will increase the club membership notably within the next year. The member-

ship now stands at about 400. Mr. Lewis is president of the D. H. Lewis Co., which sells the Rambler in Buffalo.

Carries Supplies—The Chausson-Lyon Motor Supply Co., 930 South Main street, Los Angeles, Cal., will handle automobile supplies hereafter.

Factory in Iowa—An automobile factory will locate in Fort Madison, Ia., about January 1, 1905, according to local reports. The concern will employ twenty men to start and has acquired three lots in the city.

Will Handle Clothing—The E. J. Willis Co., 8 Park Place, New York, will add a line of men's and women's automobile and motor boat clothing, including linen and pongee caps and garments, rubber, cravenette and fur clothing and other apparels.

Good Late Season Trade—The Mobile Carriage Co., of San Francisco, Cal., is reported having done a good late season trade. It received a carload of Pierce cars recently. The first shipment of 1905 model Pierce machines is expected in 'Frisco during the latter part of November.

Bought Speed Boats—According to a French journal the English admiralty has purchased the Napier Minor and the Napier II motor boats, which will be used in connection with this year's maneuvers. It is said that high naval officers are enthusiastic over the matter, as they expect the small craft will demonstrate the efficiency and the advantage there would be for the navy to have a motor boat division.

Objects to Racing—"This racing fanaticism is extremely ruinous to the automobile business," said a well known dealer in automobiles at Toledo, O., to a MOTOR AGE man a few days ago. "Following Barney Oldfield's accident at St. Louis I lost two big sales. The horrifying accidents in connection with automobile racing always have a most detrimental effect on not only my business, but on the business of every other automobile dealer. Such accidents as that at St.

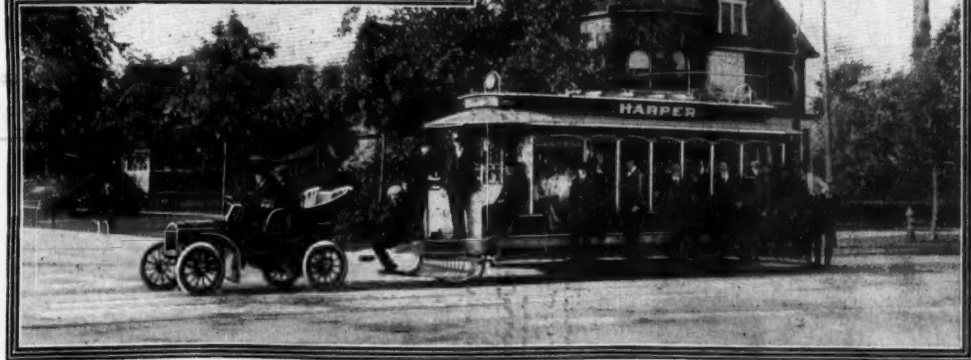
Louis scare prospective purchasers out of the notion of getting a machine. I wish this racing fad would die out."

Down in Illinois—There are seven owners of motor cars in Pontiac, Ill., while in four small villages in the neighborhood there are all told, ten motor cars owned.

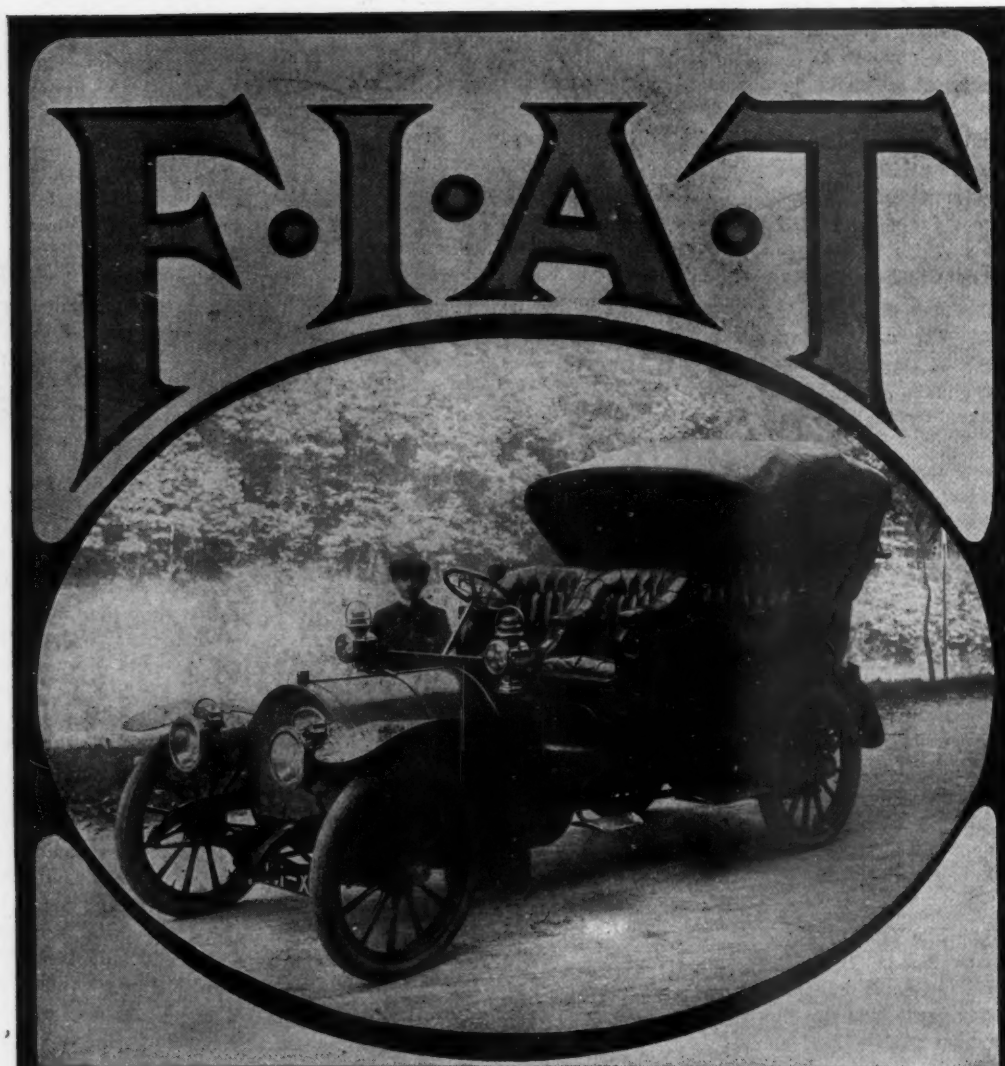
Increased Quarters—Owing to its increasing trade the Newark Automobile Co., of Newark, N. J., has secured an additional large building at Frelinghuysen avenue and Astor street. It will be fitted up as a salesroom and storeroom.

Turn About—Charles Brown and Stetson Barnes, of Syracuse, N. Y., were held up at the point of a rifle while running their automobile near Messina Springs, N. Y. They were ascending a hill when at the top appeared a team of frightened horses. The horses began to paw the air, when one of the farmers jumped from the wagon and held the animals by the head while the other pointed a gun at the young men, threatening to shoot if they did not stop the machine. They shut off the power, while their young lady companions fainted in the most approved fashion in the back seat. Brown and Barnes say that the horses were not nearly so scared as were the girls.

Fine Buffalo Garage—Among the automobile establishments which were in use this season in Buffalo for the first time the new garage and repair room of the W. C. Jaynes Automobile Co. at 881 and 883 Main street is one of the largest. The building has proved admirably adapted for the needs of an automobile business. It fronts on Main street and extends 200 feet back to Washington street, with an entrance on each street. It is 50 feet wide, giving a total floor space on the two floors of 20,000 square feet. The offices, stock room and a reception room for use of women customers and patrons are on the ground floor. Upstairs is the large, well lighted repair room in which a large number of cars can be accommodated at one time. A freight elevator takes the cars from the rear of the ground floor to the second floor. Mr. Jaynes, one of the pioneer automobile dealers of Buffalo, takes great pride in his establishment and is well satisfied with his venture. His was the first of the large up-town garages. He has received many compliments on the arrangement and completeness of the store. His line is the Winton and Oldsmobile.



THE OLDSMOBILE IN TWO NOVEL LINES OF SERVICE—AS SUPERINTENDENT'S RIG ON A LOUISIANA SUGAR CANE PLANTATION AND PULLING A LOADED STREET CAR IN DETROIT



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